ON THE "WHITE PASS" PAY-ROLL



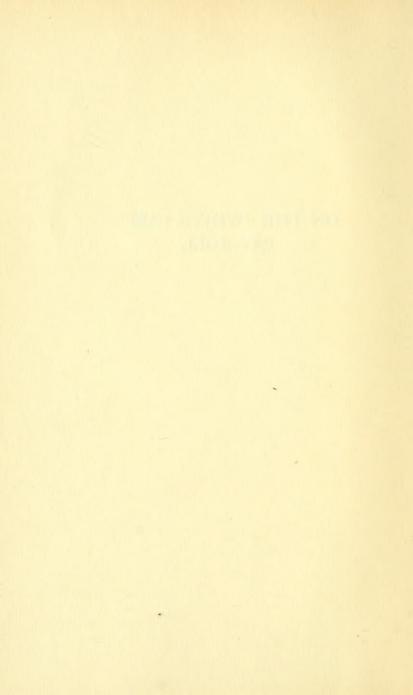
H. L. Draylon

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ON THE "WHITE PASS" PAY-ROLL





VIEW OF SKAGUAY

ON THE "WHITE PASS" PAY-ROLL

BY THE PRESIDENT OF THE WHITE PASS & YUKON ROUTE



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PREFACE

Ten years have not yet elapsed since it fell to my lot to build the "White Pass" railway through unsurveyed mountains a thousand miles from any base of supplies. The territory was in hot dispute between Canada and the United States, and the "Klondike" rush made the labour problem a nightmare. Ten years is a short time, but already the conditions have become so changed as to recall those stirring times as little as a Sunday school reminds one of a "free-for-all" fight; while of the men to whose work we were then chiefly indebted for success, none are left today upon our pay-rolls. This does not mean that we have no men left who were with us in those days. Some of our most valued and trusted "wheel-horses" to-day were with us then, but they were not upon the "firing line" in those days.

Every year, at the annual meeting in London of the shareholders of the White Pass & Yukon Railway Co. Ltd., when I respond briefly to the thanks of the meeting for the services of the staff and employees, I feel

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that it is incumbent on me to make some attempt to explain the nature of those services. But this being impossible on such occasions. I have prepared these few rough notes from our official documents and reports, and from my own personal knowledge, in the hope of enabling our English friends to understand more clearly what manner of men we have upon the White Pass pay-roll, and what is the nature of their service. But inasmuch as it is not within the power of written language to transmit the original scenes and surroundings amidst which our men do their work, I cannot hope to be able to transmit to others my own deep sense of obligation to "our bovs."

It must be understood that it is not the object of these notes to give a history of the building and working of the White Pass and Yukon Route, but of the life and work of the men on its pay-roll. Consequently little or nothing has been said of the work of Hawkins and Heney, to whose skill and energy we are chiefly indebted for the success which attended our construction work and the overcoming of the innumerable difficulties and dangers incident to it. Our obligations to them are well understood and recognized

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by our English friends, and need no words of mine to emphasize them. It is therefore the work of the men under them which I have attempted to describe and explain. Similarly, in the working of the Rail and River Divisions and of our Winter Mail Service, I have not dwelt on the work of the men at the head of our various departments, who are our valued chief officials. Their work also is well known and recognized by our friends in England, and their names are familiar to everybody interested. It is the work of their subordinates and of the rank and file that I have attempted to explain and illustrate in these notes.

I regret the frequent recurrence of the first person singular, but it is difficult to avoid this in quoting from reports made at the time or in testifying to what one has seen or heard oneself.

We do not pay extra for "Carnegie" or any other special brand of heroes. All the men on our pay-roll are expected to be able "to hold down their jobs," and it is the sole object of these notes to give our English friends some understanding of how they do it. It is manifestly out of the question to attempt anything in the nature of a day-to-

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day journal of their lives and work, and I have therefore only selected a few out of the hundreds of similar incidents which have come under my notice, in the hope that they may illustrate the conditions of our service, both during the early construction days and since then, in the working of the "White Pass." Some of the incidents may seem trivial, but life in the Yukon, as elsewhere, is chiefly made up of trivialities, and I have endeavoured, therefore, to give a fair selection of the little as well as the big things, in order to convey as correct an impression as possible. The task of selection has been difficult. from the wealth of material and the fact that other people than our employees are necessarily involved. For this reason, and to avoid the possibility of any feeling by any of our men that they have been overlooked, these notes are only intended for private circulation, and I have thought it best to protect them by copyright, which must not be supposed to imply any mistaken notion as to their having any value except for our own friends S. H. G.

PART I CONSTRUCTION PERIOD



CHAPTER I

CONDITIONS IN SKAGUAY IN 1898

The situation at Skaguav in the spring and summer of 1898 was briefly as follows: Winter had blocked the White Pass and closed the Yukon River, so the rush of goldseekers had accumulated on the coast where they were unloaded by the steamers. The country between the sea and Log Cabin, 30 miles inland, including the White Pass, was hotly claimed by both Canada and the United States, but the latter held de facto possession with a company of soldiers at Dyea. Canada kept two or three mounted police in Skaguay to support a claim to possession, but they were not allowed to exercise jurisdiction and had merely the status of private individuals. The town-site was claimed by a Company, but was in the possession of some ten thousand squatters in tents and wooden shanties. There was no law under which any municipal government could be organized, nor was there any Federal law, or courts, or police, or authority. The only representative of the Federal Government was an

official known under the imposing title of "Deputy United States Marshal," who was in fact in league with the criminal element which in the circumstances described had things all their own way, until the railway builders began to oppose them on behalf of decency and order, and to form a nucleus round which the law-abiding element could rally. The criminal element, though numerous, were in the minority, but they had the advantage of being thoroughly organized and armed, and skillfully led by a man named "Soapy" Smith, who was the uncrowned King of Skaguay. He was not a constitutional monarch, but his word was all the law there was.

War having broken out that spring between the United States and Spain, this man seized the opportunity to arm and drill some 400 of his followers and offer them as "Volunteers" to the President, who (as Smith had clearly foreseen) was obliged to decline them, and thereupon "Soapy" framed the President's autograph letter of thanks and hung it up in his gambling and drinking bar, and kept his Volunteers under arms for his own service at home. He was a tall, handsome, well-spoken man, but rather

looked down upon in the upper circles of Crime as being wanting in "nerve," until he had killed a man a couple of years previously in a particularly cold-blooded manner. But he seldom took an active part in crimes of violence, which he regarded as the work of underlings to whom he issued his orders through his lieutenants. All the plunder, however, was brought to him and divided according to his absolute will amongst his gang. His own share was moderate and never questioned, especially as he invariably lost it at once in gambling with his subordinates who were much more skillful "surething" men than himself.

His character is well illustrated by an event that occurred soon after we began surveying but before we began building the railway. A zealous "preacher" somehow drifted into Skaguay in pursuit of gold or sinners (both were plentiful), and was horrified at the unspiritual condition of the town, which, if properly supported, he proposed to remedy. He was advised to apply to "Soapy" by some ungodly wag, who probably expected to see him sent to instant execution. But the King received him affably and told him he thought his idea was a good one and worthy of

support, and handed over to him \$300 in cash. Much encouraged, the good man prosecuted his canvass and when "Soapy's" myrmidons "held him up" and robbed him that night they took from him "Soapy's" original \$300 and \$3,000 more as profit on the investment for twelve hours.

Open violent robbery by "Soapy's" gang was a daily occurrence. They met all steamers arriving as regularly as the "hotel" touts and "went through" any likely looking passengers.

Such was the state of affairs when I landed on July 2, 1898, and declined a courteous invitation from "Soapy" to join him in riding through the streets at the head of the Fourth of July procession. But matters reached a climax when on July 6th "Soapy's" men robbed a young man of \$3,000 in gold dust which he had just brought out over the White Pass from the Klondike. It was felt that whatever might be tolerated as regards people "going in," the line must be drawn at robberies of gold dust coming out, if Skaguay was to retain its boasted preëminence as the "Gateway to the Golden North." What followed was described in my reports at the time, from which I quote:

"Skaguay, July 8, 1898.

* * * * * "'In times of peace, prepare for "war — and there's 200 cartridges, anyway" "said the Purchasing Agent, coming into the "engineers' mess tent, where we were at "breakfast this morning, and laving them "down with four Winchester repeating rifles "(one for each of us) on the breakfast table. "It seems that the 'citizens' have deter-"mined to call 'Soapy' to an account and have "notified him that the stolen gold dust must "be restored within 24 hours, and that 'Soapy' "is not inclined to comply, saving the money "was lost 'in a square game." The 'citizens' "have called a mass meeting to consider what "steps are to be taken, and it means a fight, "and they look to us to lead them.

"After breakfast Heney, Hawkins, Hislop, "and myself received urgent invitations to "attend a small and select meeting of prom-"inent 'citizens,' hastily summoned because "of the feeling that nothing definite was "likely to result from mass meetings. Seven-"teen of us attended this meeting (euphem-"istically called the 'Merchants Committee,' but in point of fact a Vigilance Committee "pure and simple), but no action was taken "beyond electing a chairman and a ljourning

"to II P. M. when it was quite understood "by all present that 'active measures' "were to be adopted. Being manifestly the "least qualified for such a position, you will "easily understand that I was unanimously "chosen for chairman, despite my protests. "However, I have fortunately our 'Three "H's' (Heney, Hawkins, and Hislop) to ad-"vise me, and it would be hard to duplicate "such a trio. (That sounds more Irish than "it really is.) The first thing we decided "upon was to send Heney and Hawkins up "the Pass to prepare our camps for the hard "fighting which seems inevitable, leaving "Hislop and myself in Skaguay to deal with "the local situation and attend the meeting "to-night. Of course we shall keep in touch "with one another by our private telephone "to the various camps.

"Having attended to these matters and "our daily grist of construction affairs (which "must be attended to irrespective of revolu- "tions), I found an Italian bootblack and "made a contract with him to black my boots "for 25 cents (a shilling), which seems high "unless you saw the boots. But he had "hardly got himself into action when I felt "a light touch on my shoulder and saw Hislop

"apparently deprecating the performance. "'It is hardly wise just now' he said in his "gentle tones. I thought he meant that it "was a poor investment in view of the fact "that the boots would soon be as bad as ever. "But he explained that the public feeling "was very excited and ran high, and that "while it did not necessarily follow of course "that a man was honest because he had "dirty boots, on the other hand there was "an irresistible presumption that if his boots "shone, he must earn his living by question-"able methods. The idea may be concisely "formulated 'the lustre of a man's character "varies inversely with that of his boots." "I felt that my character was not sufficiently "established to run any risks, and reluctant-"ly cancelled the Italian's contract, but I "had to pay him just the same. What did "he care about my character!

"There are excited crowds all day on the "streets, but 'Soapy's' 'Lambs,' as he "calls his Volunteers, are working just like "London police, breaking up the groups. "One almost expects to hear the familiar "Move on now—move on please'— * * * * "July 9th. The unexpected has happened. "'Soapy' Smith is dead and his licutenants

"(including the United States Deputy Mar"shal) are in irons under guard of the Mer"chants Committee, and hardly a shot fired.
"It would be impossible to say which side
"was the most taken by surprise, but we re"covered first and consequently reaped an
"almost bloodless victory. It happened this
"way.

"The mass meeting was assembling at "9 last night on one of the wharves and two "of their number had been detailed to hold "the entrance and allow none of 'Soapy's' "friends in. No one was expecting any im-"mediate fighting, and there was only one "revolver in the crowd carried by a man "named Reid, who was one of the two men "holding the entrance. Our committee was "not to meet till II, and no one expected "any action before about 2 or 3 in the morn-"ing. A ship had just arrived with 1500 tons "of rails and sleepers that we were in a hurry "for. She had been berthed at the adjoin-"ing wharf, and Whiting (our Division Super-"intendent), and myself had been down to "see that they began unloading promptly. "On our way back we had casually noticed "the crowd assembling on the other wharf "for the mass meeting, but neither of us

"paid any attention to it, till we had left our "wharf and were in the street leading to the "wharf the crowd was on.

"We were about 50 yards from the two "men holding the entrance, and the crowd "was about 75 or 80 yards farther on down "the wharf when suddenly Whiting said, 'By "the Lord, here comes 'Soapy'—now look "out!' 'Nonsense,' I said, 'he's only bluff-"ing.' While I was speaking he passed "near enough to touch me. He was osten-"tatiously armed with a couple of big re-"volvers and a belt of cartridges and carried "a double barrelled Winchester repeating rifle "across his arm, as he shouted to the crowd "to 'chase themselves home to bed.'

"I stood laughing till I saw he was followed "about 25 yards behind by a bodyguard of 14 "of his picked men who were grimly silent and "displayed no arms, though they were notor-"iously always armed to the teeth. These "men followed 'Soapy' past me and shut out "my view, so I moved to the 'sidewalk' "and saw 'Soapy' go up to Reid and make "a bluff to hit him over the head with the "barrel of his rifle. Reid put up one hand "and protected his head by catching the "barrel. 'Soapy,' failing to shake off

"Reid's hold, jerked back the rifle suddenly "which brought the muzzle against Reid's "stomach. Reid still held 'Soapy's' rifle with "one hand as before, but he put the other "slowly in his coat pocket, and without tak-"ing it out again commenced to shoot his "revolver. 'Soapy' at the same instant "began to pump shots from his Winchester "into Reid's stomach.

"It would be impossible to say which "fired first, the shots were absolutely simul"taneous. Each fired four shots, though one "of Reid's first shots had gone clean through "Soapy's' heart. It was not murder so "much as a sort of spontaneous killing. "Neither man had any intention of killing a "moment before, but they must have seen "death in each other's eyes at the last mo"ment and both fired together. They fell "together in a confused heap on the planking "of the wharf, 'Soapy' of course stone "dead, and Reid dying. It all happened in "an instant.

"Meanwhile, his bodyguard were within "25 yards of the two prostrate men and of "the remaining entrance keeper, a little "Irishman named Murphy who worked for "us. When his Guards saw 'Soapy' fall,

"they gave a ferocious yell and drew their "guns' (as they call their heavy revol-"vers), and sprang forward for vengeance on "the unarmed crowd, and it looked as if "what I had mistaken for a comedy was "going to become a shambles. But the "little Irishman was the right man in the "right place and rose to the emergency, as "our White Pass men have a way of doing. ""Begob, Sorr,' he said to me an hour later, "'I had nawthing but a pencil whin I saw "thim tigers making jumps for me.' But "he had his quick wits, and like a flash he "had snatched 'Soapy's' Winchester from "the dead man's hands, and the leading "'Tiger' saw Murphy's eye gazing at him "along the sights. Involuntarily, the 'Ti-"ger' checked his rush and was passed by "another of the Guards. That instant "Murphy shifted his sights and covered the "new leader, and the same thing happened. "By the time he had in turn covered a third "leader, the 'tigers' behind realized that "the three or four first of them were sure "to be shot and they were not in such a "hurry somehow. Then the men in front "realized that they were not being supported "and looked round to see why - the rush

"was over, and in another moment the whole fourteen 'Tigers' broke and fled.

"At that instant the crowd on the wharf, "that had stood paralyzed with terror, "became a blood thirsty pack of wolves and "with a vell they started in pursuit, unarmed. "It was lucky that I had moved aside on to "the sidewalk. The 'Tigers' swept past "me and in another moment the crowd, "jumping over the dead 'Soapy' and the "dving Reid in their mad rush, tore by me "velling 'Get your guns, citizens.' When "they had gone by, I ran over to our office "tent and telephoned to Heney at Camp 3 "and Hawkins at Camp 5 what had hap-"pened, and arranged with them to hold the "Pass and let no one go by without a written "order signed by Hislop or me, and to hold "their men ready to come down and help "us to clear up the town if we called for help. "But it wasn't necessary.

"We put armed guards on all the wharves "with orders to shoot on sight if anyone tried "to escape in a boat. Thus escape by land "or water was cut off, and we proceeded to "round up the gang. Some tried to get "away in boats and were caught by our "guards. Some tried the Pass, and Heney

"and Hawkins got them, and the rest we got
"by an organized search of the town before
"they had time to rally, except a few who
"took to the mountains where we shall
"starve them out. But we got more than
"we could find jail room for, so we selected
"thirty-one of the leaders, and let the rest go
"with a warning to get out of town, and
"keep out. Now our problem is to save
"the men we have in jail from the
"infuriated mob which is clamoring for their
"blood. * * * *

"July 11: * * * * * We have got the "men who escaped up the mountains, in"cluding three of 'Soapy's' head men. But
"Reid's death has made the feeling very
"bitter, and we are at our wits end to guard
"our prisoners from the fury of the mob. We
"have no jail of course to keep them in —
"nothing but a board shanty where they
"have hardly standing room — and huddle
"together like sheep, while the mob, night
"and day, howl round the shanty for their
"blood. We have detailed some of the
"Railway men whom we can depend on to
"guard the shanty.

"Meanwhile, the Committee is taking the "evidence of the prisoners one by one, partly

"in the hopes of implicating some of the mer-"chants and 'Hotel' keepers who are sus-"pected of having had secret dealings with "'Soapy,' but chiefly to give the mob time "to quiet down. We tell them (the mob), "that if they hang any of the prisoners they "will close their mouths effectually and "frustrate our efforts to get at the men we "want the most. Up to date this has been "effectual in preventing bloodshed, but the "mob is getting impatient. Two men on "our Committee are opposed to our policy "of holding the prisoners in terror and ex-"amining them, and advocate 'turning the "whole bunch loose," and letting the mob "do as they please. We suspect these men "of being themselves implicated, and that "their idea is that if the prisoners were loosed, "the mob would either hang the ones who "know anything, or if not, that there would "be no longer any reason for them to give "any evidence. In either case their mouths "would be closed, which seems to be what "these Committeemen want. * * * * * "

"fuly 13th: **** The mob is gradu"ally quieting down and there is less danger
"of bloodshed. The prisoners have dis"closed nothing of any value to us, and

"encouraged, we think by their friends on "the Committee, were beginning to talk "about 'their rights.' They could give us a "good deal of trouble if they dared, because "of course we have no shadow of law to "warrant their imprisonment, and still less "for taking the money found on them and "using it to pay for the stolen gold dust and "for a fund to pay the expenses of legal "prosecutions against those that we have got "legal evidence against, and to pay the cost "of 'deporting' the others. This being so, "before the mob got too tame, I took one of "the prisoners who referred to his 'rights,' "by the shoulder and led him to the window "of our room from which he could look down "on the mob, and said to him, 'You are quite "right, we have no authority for holding "you a moment against your will. If you "say the word, I will turn you loose into that "mob this minute. What do you say?" "This was more than he had bargained for, "so he began to hedge, as I expected. Then "I said, 'If you don't want us to turn you "loose this minute, you must sign this "paper,' and I drew up a written request to "the Committee to hold and protect him "until he could be handed over to lawful

"authorities, and in consideration of our "doing this full authority was given us to "apply all money found upon him for the "uses of the Committee.

"He rather 'jibbed' at signing this, and "wanted to consult the other prisoners, but "I said, 'No, sign or step outside. We can't "be bothered with you any longer.' So he "signed. Then we put him in another room, "and sent for all the other prisoners, one by "one, and repeated the same proceedings "until all had signed before we allowed them "to confer with one another.

"This not only got us out of a false position but provided funds (i) to pay for the stolen gold; (ii) to carry on the prosecution of the six or seven (including the United States Deputy Marshal), against whom we have legal evidence and (iii) to deport those that we can't prosecute. The first batch (14) of the latter go South on the Athenian to-morrow, and I am going on the same ship, as the work of the Committee is now accomplished anyhow, and I have to go to Victoria to see the Provincial Government about the high handed refusal of the Canadian Government to let us work beyond the Summit, in spite of our Canadian and

Conditions in Skaguay in 1898

"Provincial Acts of Parliament, and in spite of the fact that the ground in question is within the Province of B. C.

"We have got a letter from the officer in "command of the Mounted Police at Log "Cabin, saying that he has orders from "Ottawa to stop all work on the railway, "and that he proposes to do so. As he has "a lot of police with Gatling guns, he could "make it rather warm for us if we resorted "to force in support of our undoubted rights "under our two Acts of Parliament, and "besides, there is no sense in putting our-"selves in the wrong. They can't stop us, "all they can do is to annoy us and make "it cost us more if we have to work in "winter." * * * * *

So terminated the episode of the killing of "Soapy" Smith, but before leaving the subject I may say that the men we sent for trial were all convicted and given heavy sentences, including the "Deputy United States Marshal." The deported men who went south with me in the "Athenian" had the bad luck on landing to run into the very arms of the Seattle Chief of Police, waiting at the gangplank to meet his sister-in-law. He recognized some of them and took in the

lot on suspicion. It turned out that most of them were "wanted" in various places in the States, and several were hanged, and others given long terms in jail for their previous crimes.

After the events just described, the want of some more orthodox body than a Vigilance Committee was felt, and the citizens decided to hold an election, which was done without a vestige of legal warrant, and a Mayor and City Council elected, a Chief of Police appointed, and in short a complete municipal organization was perfected. This body granted franchises (we got one ourselves for our Broadway track), and carried on the City government for a year or two till Congress passed a law providing for municipal elections in Alaska. The reaction from the "Soapy" Smith régime was so complete that not a single one of the acts or transactions of this unique body were ever questioned at the time or since, and the first legal municipal body elected in Skaguay ratified and adopted them "en bloc."

The town of Skaguay was hemmed in between the sea on the south and high trackless unexplored mountains on the west, north, and east. Its sole line of communication

Conditions in Skaguay in 1898

with the interior was by the trail leading over the White Pass and thence via Log Cabin to the head of Lake Bennett.

Most people have an idea that a trail means a sort of a bridle path more or less free from serious obstructions and adapted for travel. But the White Pass trail was far from answering this description. It was simply the line of travel used by the Indians before the Klondike was discovered. Then came the rush of gold-seekers in mad haste to reach their Eldorado, and the Indians piloted the first of these over their trail to Bennett and helped them to carry over their belongings at the rate of two shillings or upwards per pound weight. The Indians were good climbers, and like all Indians, too lazy and improvident to do anything more than was absolutely necessary for the exigencies of the moment, so of course they made no attempt to improve their trail. They had never seen a horse, and considered that any rocks, boulders and fallen timber which a man could climb over and any swamps and streams which he could wade were no obiection whatever to a trail or line of travel from one place to another.

As the rush of gold-seekers increased they

began to bring pack horses with them in the hope of being able to use them on the trail. and the owners of the first horses were compelled to do a certain minimum amount of work in order to make the Indian trail at all possible for horses. But the moment that a horse could by any means be got over the trail, all further improvement ceased and was never again resumed. The first horses were got over when there was no great crowd and it was possible to unload a horse and lead him light over a bad place, reloading him on the far side. But as the rush increased this could no longer be done, and it was then that the trail became so fatal to horses as to earn the sinister title of the "Dead Horse Trail"

It led from the head of the gravel flat upon which the town of Skaguay was situated, and followed the rocky banks of the Skaguay River to the foot of the White Pass where it left the River, and turning sharply to the left, ascended the bottom of the White Pass Canyon to the summit of the Pass. Then in order to get round the network of small lakes lying between the Summit and Log Cabin, it ascended a thousand feet further on Turtle Mountain and down to Log





ON THE OLD WHITE PASS TRAIL



Conditions in Skaguay in 1898

Cabin in the Tutshi Valley. From there it climbed again over another pass into the Bennett Valley. During the rush the narrow trail was blocked ("Standing room only"), for the greater part of its distance of 40 miles so that neither man nor horse could go faster or slower than the speed of the huge living serpent that slowly wound its way over the Pass. To try to go faster was to be stopped simply; to go slower for a man meant climbing the rocks up or down "off the trail," but a horse could not do this and had to keep in line or fall on the trail. A fall meant death, as a rule, unless he could get up again pretty quickly, which, overloaded and exhausted he seldom could

The lot of the horses on the trail was awful beyond description. Their owners, mostly ignorant, often brutal, sometimes both, began by overloading them at Skaguay, and as the distance was only 40 miles "guessed the horse could rustle through somehow" without food to Bennett. But though the distance was "only 40 miles," it was over a rough, rocky trail often so steep that a foot placed wrong meant a fall to any horse, and especially to a tired and overloaded one. When a delay occurred, the horses for miles

back had to stand *loaded*, as no one could tell at what moment travel would be resumed.

After 24 hours of this, with no refreshment beyond the tightening of his pack girths, a horse would find his load an intolerable burden, but would usually not yet have reached the Summit, and still have the dreaded climb up Turtle Mountain, and then the dangerous descent to Log Cabin, upon which his salvation depended on his exhausted and trembling fore legs not giving way. If he reached Bennett alive, his owner would sell him, to be led back to Skaguay and resold to a new owner until he fell on the trail—and that was the end.

The law of the trail was this—that a man be given time to remove his pack from a fallen horse, and then the procession "moved on." Sometimes an owner or bystander would take the trouble to kill the poor wretch, and sometimes not. The first time I went over a bad part of the trail, I saw a horse that had fallen and broken his leg a few minutes before in a place where the trail passed between two large boulders. His pack had been removed, and some one had mercifully knocked him on the head with an

Conditions in Skaguay in 1898

axe, and traffic had been resumed across the body, which was still warm when I passed. When I returned that evening there was not a vestige of that horse left except his head lying on one side of the trail and his tail on the other. The traffic had ground him up.

The lucky horse was the one that died first, and some of them realized this themselves. There are a number of well authenticated cases of horse suicide told by our men. The only occasions upon which our people ever got into any altercation with the public was when they interfered on behalf of the wretched horses. But the isolated cases that were thus relieved were few in comparison to the volume of animal suffering that marked the awful "Dead Horse Trail." Our men had plenty to be proud and thankful for when the rails reached the Summit, but nothing gave them keener satisfaction than the knowledge that they had put the unspeakable Dead Horse Trail out of business forever.

In those days drinking was rife in the "Golden North." A man who refused to drink had a fight on his hands straight off. It was the custom of the country. It was

a custom that ruined hundreds of good men and made it almost impossible for Companies to secure good management. No matter what care might be taken in selecting the Manager, a few months after he "went North," he "went wrong," as a rule. If a man was invited to have a drink by one of a group he had either to refuse and fight, or if he accepted, another member of the group would soon say to the barkeeper, "Take the orders—this is on me," and this meant another drink all around, and so on till all present had "set up the drinks." By that time probably other people would have joined in, and said the usual formula, "This is on me," and so the drinks would follow, round upon round.

A well known and popular man who spent his time and money in this way died up North in the early days, and as usual in such cases, his assets were insufficient for funeral expenses. But his friends subscribed and not only buried him but ordered a handsome tombstone. There was a debate, however, as to what to put on it. It was felt that the deceased's name and age would be hardly sufficient, while on the other hand religious expressions would be clearly inappropriate.

Conditions in Skaguay in 1898

Finally the deceased's favorite words "This is on me," were decided to be doubly appropriate on a tombstone, and it was so ordered, and the tombstone was considered by all as being an ingenious "straddle" of a difficult problem, and is an object of interest to this day.

A man who didn't drink was popularly regarded as hardly human and quite outside the pale of society. Consequently the steady habits of the "railway men" sometimes placed their friends in a difficult position in attempting to defend them against criticism. I remember an amusing instance of this on my first trip into Atlin. The others of the party had gone off to forage for food. But Atlin food didn't appeal to me that day, and I had remained in our "headquarters," which was a small room, separated by a curtain from a drinking bar above which we slept. (It called itself the "Nugget Hotel.") Presently a man came in and invited the barkeeper to "take something" with him. Then he went on to remark, "Say, Tom, I've been "keeping an eye on them — Rail-"way men since they've been in this camp, "and they're nothing but a —— lot of "---," (the reader must supply his

own explosives. I could, but I won't!). This broadside, delivered in a confident manner and loud voice, evidently took my friend Tom rather aback, as he knew perfectly well that I must have heard every word of it through the curtain. To gain time to think, Tom said, "Oh, I don't know, why do you say "that?" "Well, I've watched them careful, "and I can't see where they have ever asked "any man in the camp to have a drink, or "have taken a drink themselves even. I call "them nothing but a lot of — — —," (fireworks as before). But by this time Tom had decided on his line of defense, and without hesitation he replied philosophically, "Well, you see, men are different. Now you "and I spend our money in Booze, but these "railway chaps, they blow it in at Faro." This silenced our critic. In an apologetic tone he said, "Oh, is that so?" We were human after all! "Assume a virtue if you "have it not," may be all right in other climes, but in the Golden North, sometimes it is necessary for your friends to endow you with imaginary vices in order to protect your character.

CHAPTER II

CONSTRUCTION OF FIRST SECTION

When our Surveyors reached Skaguay in May, 1898, they were dumped ashore, like everybody else, on a gravel flat, which filled the narrow valley between two snow-clad mountain ranges towering six or seven thousand feet above their heads. The gravel flat was called Skaguay and already overcrowded with human beings living under the conditions described in the previous chapter. Our men with difficulty found room to pitch their tents and establish themselves. All they had to do was to find the best way through those mountains to Lake Bennett, and to find it "quick."

Except the trail, the entire country was a wilderness of steep mountains, averaging higher than Mont Blanc does above the surrounding valley levels. The sides of these mountains were so thickly timbered to the snow line with small spruce that half a mile an hour was good progress for an active man, and of course no levels could be run or preliminary surveys made without clearing the line of sight. The densest

ignorance prevailed as to the topography of the country. People knew where the White Pass was, and that was all. (Some of them didn't know this and strayed into "False Pass.") The relations of the mountains to one another in a range or where the waters in the streams had their source, no one knew or cared. Yet our men had not only to find a way through this 40 miles of mountain wilderness for our locomotives, but it was important to find the best way, and to find it "mighty sudden."

Five surveying parties took to the hills and vanished for weeks, and in the end we had five complete surveys covering both sides of the Skaguay River and of the White Pass as far as the Summit. The distance as the crow flies is only 14 miles from the Summit to the sea, but making the most of the contour of the mountain sides in order to "gain distance" (i. e., to get easier gradients at the cost of increased mileage), it was possible to get the line of 20 miles which was built, and it is a curious thing this line was made up of bits from every one of the five lines surveyed, and that with our present full knowledge of the country it has turned out to be the very best line possible.

Hislop was in charge of all the surveying and vibrated between the camps directing and checking everything. In doing this he had to cross rivers, mountains, glaciers and snow fields with the speed and certainty of a mountain goat, and as the work at the five camps kept him busy when he reached them, he had little time for sleep or rest during the weeks his camps were scattered through the mountains. But sleep or rest or even food were secondary matters to him while he was "running his lines."

Besides keeping in touch with his five camps and pushing the surveys of the White Pass, Hislop had another and equally important duty imposed on him, i. e., he had to satisfy himself that the White Pass was in fact the true "Gateway to the Golden North." Our Act of Parliament could not make it so, if a better route existed. On this point there were all sorts of rumours.

One of the most robust of these was the "Warm Pass" Legend. It was said to be 1,000 feet lower than White Pass (which is 2,865 feet above sea level), and to be approached by easy grades, and to descend through smiling valleys to the waters of Taku Arm, part of the chain of Great Lakes on the

Upper Yukon. Hislop no more expected to find "Warm Pass" anything of this sort than he expected to pick orchids in it, but he had to find out.

Opinions differed widely as to where "Warm Pass" was to be found. Some said up the East Fork; some said up the North Fork, while some opined that its tide water approach was "down the Lynn Canal a piece." It being Hislop's habit to find out for himself, this conflict of evidence did not worry him. He began by climbing Mount Dewey (not then named), and from a height of 7,000 feet, could see to the south nothing but mountain tops separated by an immense ice field, from which the glaciers descended to the valleys of the Lynn Canal. This confirmed his own view that there was no "Warm Pass" entrance "down the Canal a piece" and narrowed the investigation down to the East and North Forks of the Skaguay River. From a trip up the East Fork he learnt that if there were any warm or other passes at its head, a railway would have to jump a good healthy glacier (now known as Denver Glacier), to reach them. So by a process of exhaustion, he convinced himself that if the "Warm Pass" existed at all, it must be sought up the North Fork.

No one knew where this branch of the Skaguay River went or what was at the head of it, or on the other side. Sooner or later if one could only "keep on going," one would come to some part of the chain of Great Lakes and, as they were then clear of ice, they were navigable. But navigation presupposes a boat, and none would be available along its hundreds of miles of shore line, except for a short distance between Lakes Bennett and Marsh, followed by the goldseekers bound to Dawson — and Hislop wasn't going to Dawson. The success of the expedition depended on the question of whether one could get through to some point on the line of Dawson travel with what food could be carried with one. Having exceptional powers of covering the ground and going without food or sleep, Hislop decided (Heney not being available), to go alone rather than hamper himself with companions who could not keep up with him. He also decided that it was better to travel light than load himself down with blankets and food. In reply to objections he quietly remarked, "Well, if one doesn't start, one won't get there," and putting a few biscuits in the pocket of his light shooting coat, off he went.

We were very apprehensive that he might meet with some small accident like a sprained ankle, which would mean death, as we would not know where to search for him if he did not turn up. But we could at least organize an expedition to patrol the shore line of the Lakes and watch for him, and this was done. Forty-eight hours after he started up the North Fork with his biscuits, this expedition found him exhausted (and without his biscuits), at the mouth of Windy Arm. He had in that time covered over 50 miles of mountains and swamps and snow fields, and reached the head of Windy Arm, almost barefoot and with his clothes in tatters, and feet bleeding. He followed the shore of Windy Arm until he came to an insurmountable rocky cape projecting into the Lake and further progress on foot was impossible. The icv coldness of the water gave no hope of swimming round the cape. Most men would have lain down to meet their fate, but not Hislop. He found two small dead trees, driftwood on the beach. With the fibrous roots of spruce trees, he converted them into a sort of raft, and with the branch of a tree for motive power and rudder, he launched himself on the stormy waters of

the well named "Windy Arm." After passing the Cape, the wind blew the raft out into the Lake, so he could not resume his journey on foot if he had wanted to.

His greatest difficulty on the dangerous and tedious voyage of ten miles down the Lake, he told us afterwards, was to keep awake. He fell overboard twice, but climbed back. Finally he managed to land, where our men found him an hour or two later. His first words (modest as ever), were, "Well, boys, I didn't find Warm Pass!" And no one else has ever found Warm Pass from that day to this—and no one ever will.

In the early days of construction, there was naturally the keenest interest felt in London as to the nature of the country, and the progress of the work. It has never been even hinted at, but I should not be surprised if there had been some misgiving as to the quality of the work. Such misgiving would have been natural, in view of the fact that personally I knew nothing in those days of railway building, and American construction was generally supposed in England to be cheap and flimsy in its nature, and it was known that the men I had selected had all

been trained in the American school—though Heney and Hislop were Canadians by birth and education. In view of these facts it was important to secure good photographs of the work and country, and for that purpose we engaged a special photographer, who was very daring and successful. His photos were collected in albums in their proper order, and sent forward with descriptive explanations, and were much appreciated by our friends in London. But the work of securing the negatives could not be appreciated by anyone who was not on the spot.

Soon after he entered our service, Barley, the photographer, was seriously injured by a blast which he was attempting to photograph. I quote from my report at the time. "We have now our own photographer—or "what remains of him—and he is hard at "work up the line. But he was nearly killed "this morning, and his camera demolished. "He was trying to 'catch' a big blast, and "he caught it all right—on the leg. A big "boulder fell on the camera and obliterated "it. Luckily the boulder just missed him "and he was only hit with a small piece of "stone about the size of a man's head. When



ESPERATION POINT SHOWING THE NATURE OF THE COUNTRY



"he was picked up he was conscious but "speechless, and pointed in disgust to where "the legs of his camera were sticking out "from under the boulder. He won't be able "to walk for some days, but is putting in his "time developing and printing at the Hos-"pital at Camp 3, where he was carried after "the accident. He nearly broke his neck "three days before trying to climb a preci-"pice with his camera. The man with him "had turned back, saying he was not used "to such 'high life.' You will see that if he "lives a few weeks longer you will be likely "to get some 'risky' pictures. He says he "will photograph the sound of a big battery "blast for you and stuff the echo and send "it over to you. So you ought to be satis-"fied." This illustrates the way our men cheerfully exposed themselves to danger even when their work was not supposed to be dangerous.

As construction progressed it became necessary for the Trustees for the Bondholders to send an Engineer of their own selection to watch the work and see that it was in accordance with contract. When our men heard of this, the idea was not at all popular. Hawkins was by nature very

proud and sensitive, and though he said little, one could see that he resented the notion that he required watching. Hency and Hislop chaffed about the fun they would have with the "Trustees' man," and evidently expected the usual type of English "Consulting Engineer"—a type with which they were familiar, and from which the Yukon is no more exempt than other portions of the globe. Therefore, when Mr. Brydone Jack turned up one day and presented his credentials, I hoped rather than expected that relations would be cordial.

I don't know what his instructions were, but he evidently thought he had better be on his guard and watch things pretty sharply. But he did his duty so considerately and showed such mastery of his profession, that our men realized at once that he was no "Consulting Engineer" and soon learned to respect him. Jack's engaging personality did the rest and before long our men had admitted him to their friendship and confidence. For convenience in working they invited Jack to share their tent and live with them and Jack gladly accepted, as this gave him closer insight into their ideas and plans than would otherwise have been possible. From that time

forward they became inseparable and worked in common. No stranger could have guessed which one of the three men was to keep watch on the others. Jack helped our men in their work for the sheer love of it, as his own duties only occupied a small part of his time, and were little more than clerical, once our men admitted him behind the scenes. We were indebted to Jack for many helpful suggestions, while he in turn became imbued with the spirit of our men's work and prouder of it, almost, than they were themselves. As the winter progressed the sympathy between the three men living and working and sharing dangers and hardships in common became deeper and deeper till they were more united than most brothers.

But there was one moot point that never was settled. Heney and Hislop were like mountain goats upon a trail. Long before Jack's advent they had "tried one another out" in many a terrible day's climbing and covering ground, until each had admitted to himself that the other was his equal on the trail. Then Jack came to live with them and because he was as a brother to them they watched his performance on the trail with affectionate interest. Now Jack was

physically a magnificent man, and his pluck was unsurpassed and moreover, it so happened that he rather prided himself in never having met a man who could "stay with him" on the trail. Any man who bumped up against either Heney or Hislop in such a mood was likely to meet with trouble.

But for a long time they had no suspicion of it, and merely thought he did very well indeed. Of course no word was spoken between them of all this, but gradually it dawned on Heney and Hislop that Jack, whose performances they had been watching with pride and interest, was in reality "going jealous" of them and anxious in a perfectly friendly way to establish his supremacy on the trail. This state of affairs could not last. Without a word said—all felt that the question had to be settled when they started on their last trail together in this world, one morning early in February, 1899.

The snow was deep, the trail was heavy, the cold was bitter, the wind on the summit of the Pass was fierce, almost preventing progress at times, part of the time there was a "blizzard," and at all times the trail was steep. Jack had never seen Heney and Hislop in real earnest before nor ever come across



HENEY AND HISLOP ON WINTER TRAIL



JOHN HISLOP AND HIS FRIENDS



their like. Few men could have stayed with them that day till noon when they halted for food and rest. Jack however was one of the few. But he had not been hardened to fast work on the trail as they had been by keeping company with each other for many months previously, and his exertions had begun to tell on even his magnificent physical powers when they "hit the trail" again after the brief noon interval. He was now on the defensive and doggedly he stuck to it all afternoon in the failing light and through the increasing cold.

In vain they urged him to "take it easy"—the more they protested, the more he persisted, with failing strength but unfaltering determination not to give in. When they reached camp at dark Jack was exhausted and never knew that his generous friends were any less so. It was a bitter night, the thermometer far below zero, and the tent gave little protection from the fierce wind to the exhausted man. The morning found him enfeebled, unrested, and feverish. But he scorned the idea of going down to our Hospital at Skaguay. Some days passed in camp, in miserable anxiety by Heney and Hislop, and increasing fever on Jack's part.

Then came the day when they carried him in his blankets to the engine of the "Work train" and uncoupled her to run him down to Skaguay. Pneumonia had set in.

In the short time he had been on the White Pass he had endeared himself to everyone with whom he came in contact and the fireman shovelled in the Company's coal and "got her hot" though he knew that the engine could fall down the hill "cold" and would need steam only for her air brakes. Then they started. "Better run some," said Hislop to the engineer, who saw his agitation and forgave him the unwarranted suggestion that any urging was necessary to the man upon whom perhaps Jack's life depended. The way that engine "ran the hill" that day is spoken of still as an instance of the intervention of Providence. She jumped and rolled and plunged around the sharp curves of the unfinished track in a way that no engine has ever done before or since (not even the one that "ran away" with a green fireman when he tried to back her out of the Glacier siding without his engineer and finished on the beach at Skaguay). But she "got there" with the sick man and they knew something was coming by the way she whistled for a

clear track coming into Skaguay and pulled up at the Hospital.

It was all to no purpose—poor Jack was doomed and in spite of every loving care he died the next day—and every man on the pay-roll felt as if he had lost a brother. Heney and Hislop for months went about their work as men bereaved. Hawkins and I had not had the same intimate association with poor Jack, but we too had learned to value him as a "White Pass man." We met his coffin at Vancouver and as we stood beside his open grave we felt a gap in our ranks almost as great as when a few years later death claimed Hislop on his honeymoon.

I don't know what Jack reported to the Trustees about our work, but when the time came to fill his place it was offered to Hawkins to his intense satisfaction, and he accepted, resigning his post as our Chief Engineer, to which Hislop was appointed in his place. It was a graceful act on the part of the Trustees, and a very wise one as well, because Hawkins—himself the soul of honour—was so touched with this proof of their confidence that their interests were doubly protected in his hands, if any protection had been needed.

It would be tedious to attempt any detailed account of the work of building the First Section of the railway through the mountains to Lake Bennett. Our initial difficulties, after Hislop and his "path finders" had found the way for the locomotives, consisted in the distance from the base of supplies, and the difficulty of securing an adequate supply of labour. Skaguay is 1,000 miles from Vancouver, Victoria, or Seattle, which are the nearest bases of supply, and in 1808 the steamers in the Skaguay trade were slower, smaller, and fewer than at present and their capacity was fully occupied by the gold-seekers. They were therefore not available for the carriage of our supplies and material. The war between the United States and Spain had resulted in the sale or charter of every vessel on the Pacific that would float (and some that wouldn't), to the United States Government. So it was a serious problem to arrange the transport of the immense tonnage of supplies, equipment, and material needed for the construction of the railway.

We solved it by the use of "wrecks" i. e., large ocean-going sailing ships that had been wrecked, and sold cheap by the under-

writers to local owners who had re-floated and partially repaired them. Some of them had no masts and spars, and none of them were sea-worthy for an ocean voyage. But the voyage to Skaguay is more sheltered than the lower Thames, and we were able to arrange to have these wrecks, which were euphemistically called "barges," towed backwards and forwards with our men and material, and were able to get insurance on their cargoes. But at the best it was slow work, and the absence of telegraphic communication in those days added greatly to our difficulties.

The labour difficulty was still more serious. It was obviously out of the question to engage men in the ordinary way and convey them in hundreds at our cost to Skaguay, because while the gold fever was at its height, the moment they set foot ashore in Skaguay would be our last glimpse of them. We therefore had to refuse to convey labourers at our expense to Skaguay and this at once shut us off from all the ordinary sources of labour supply. Hency had a number of skilled men whom he could control, and these formed the nucleus for our gangs—a sort of "skeleton battalion" which we had to

try to fill up by voluntary enlistment at Skaguay. So far as numbers went we were more successful in doing this than might have been anticipated because Skaguay at that time was full of men of all sorts on their way to the Klondike, but temporarily detained, waiting the arrival of friends, or money, or for other reasons. These men were glad of the chance to get not only free board and lodging in our construction camps, but to earn money instead of having to spend it.

As a general rule, they were immensely superior to ordinary labourers in education and intelligence, but most of them were quite unused to manual labour. However, they soon got hardened to it, and their quick intelligence enabled them to learn rapidly. But the great drawback to them was that by the time they had become useful, their friends, or their money, or whatever they were waiting for, would arrive, and they would resume their journey to the Klondike. In the words of Camp-foreman Foy, "There was always some a-coming, and some a-going, and some working." Amongst them there were lawvers, doctors, artists, college graduates, French chefs, schoolmasters, and in short

every conceivable sort of occupation—except labourers. Probably no other rail-way in the world was built by such highly educated men as worked on our First Section.

By August 8th, 1898, we had got our working force up to a little over 2,000 men. On that day the news came of the new gold discovery in Atlin, comparatively near our line, and the excitement spread like wild fire through our camps. Our men left in droves, most of them without waiting to draw their pay, but on the other hand most of them took with them our picks and shovels. In 48 hours our working force was reduced to below 700 men and it was October before we were able to fill up our ranks again.

By that time, winter was upon us, and we had to fight the forces of an Arctic winter as well as the natural difficulties of mountain railway construction. The strong winds and severe cold made the men torpid, and be-numbed not merely their bodies but their minds, so that after an hour's work, it was necessary to relieve them by fresh men. The result was that in consequence of the Atlin "stampede" and the delay caused by the advent of winter, instead of reaching the

Summit of the White Pass by Christmas, 1898, our track did not get there till February 22nd, 1899. Then the camps were moved over to the Bennett end where there was comparative shelter in the timber and the rest of the winter was more or less free from the awful hardships which attended the work in reaching the Summit.

The nature of this work added immensely to the difficulty of winter construction. It was necessary to blast the road-bed out of the solid granite of the precipitous mountain sides which in many places were so smooth and polished by the action of extinct glaciers that there was no foothold for the men and they had to build working platforms secured to crowbars drilled into the polished granite. The wind was so strong that the men in exposed places had to be "roped" while at work in order to prevent their being blown off the mountain side. By October, 1898, the work had got above the "timber line," so the men were exposed to the full fury of the Arctic winter.

Between Skaguay and Fraser, near Log Cabin, a distance of 28 miles, there was not a wheelbarrowful of gravel or loose earth, the line was entirely on solid rock or bridges.



CUTTING THE GRADE ON TUNNIL MOUNTAIN



Construction of First Section

This will give an idea of the heavy nature of the work. The ballast for the track had to be hauled from the bed of the Skaguay River at the one end and from the gravel pit at Fraser at the other.

Without going further into details, it will doubtless be clear that the construction of the First Section was a remarkable performance in railway building, and that the men who did the work earned their money and are entitled in addition to be held in kindly remembrance by the men who provided the money.

In spite of the hardships to which the men were exposed, Heney took such good care of them, and fed and housed them so well, that their health was remarkably good. There was no serious sickness, and very few serious accidents. Our Hospital was chiefly occupied by cases of sprains, frostbite, hurt fingers or feet, and occasional sickness of a temporary nature.

Heney's rule about liquor was strict and simple—"No Liquor allowed in camp." When Camp 3 (at Rocky Point), was started one of "Soapy" Smith's gang set up a gambling and drinking tent near by. Heney ordered him off. He refused to move his tent and

said he "guessed it had as good a right to be "there as Heney's," which was true, of course. But Heney was not the man to split straws over nice questions of technical rights. He sent for Foy, the camp foreman, and pointing to a big rock, just above the drinking den, he told Foy in the hearing of the owner, "That rock has got to be out of that "by 5 to-morrow morning—not a minute later, "mind." Then he walked off, and left "Soapy's" friend to think it over. He evidently concluded that it was a bluff and went to bed with an easy mind.

Next morning early Foy sent a rock gang to put a few sticks of dynamite in the rock. They reported "all ready" at ten minutes to five. At five minutes to five he sent a man to the tent to wake its occupant. He refused with bad language to get up so early. Then Foy went himself and said, "In one minute "by this watch I will give the order to touch "off the time fuse. It will burn for one min-"ute and then that rock will arrive here or "hereabouts." The man in bed told Foy to go to Hades. Foy replied, "I'm too busy "to go this morning but you will unless you "jump lively—Fire!" Then he used the 60 seconds left to retire in good order behind a

Construction of First Section

sheltering point of rock, where he was joined ten seconds later by the tent owner in his "under-wear" (it was another custom of the country to sleep in them), and together they witnessed the blast and total destruction of the tent and its stock of liquors. Then Foy went up to Heney's tent and reported, "That "rock is down, sir." "Where's the man," asked Heney. "The last I saw of him he "was going down the trail in his underclothes, "cursing." "That's all right," said Heney, and we had no more bother of that sort.

CHAPTER III

CONSTRUCTION OF THE SECOND SECTION

The first train from Skaguay ran into Bennett City on Lake Bennett on July 6th, 1899, a year after construction had commenced on an active scale. Forty miles of railway through the mountains connected the waters of the Pacific Ocean with the head waters of the Yukon River, and completed our First Section. Considering the difficulties of surveying the line, the immense amount of heavy rock blasting, bridging and other difficulties of construction, our men had every right to congratulate themselves on their rapid work. But for the delay occasioned by the Atlin "stampede" we could have reached Bennett more than a month earlier.

No time was lost in attacking the Second Section from the head of Lake Bennett to the foot of White Horse Rapids, a distance of a little over 70 miles. The first 27 miles runs along the East shore of the Lake and involved heavy rock blasting. But till this portion could be completed the Lake itself would form a connecting link with the

line beyond. It was therefore decided to establish camps for the rock gangs only, along the shore of the Lake, and to transfer the rest of our forces and equipment to Caribou Crossing at the foot of the Lake and push work between there and White Horse. This programme involved getting sufficient rails, engines, rolling stock, and material assembled at Caribou Crossing before navigation closed, in order to finish the line from there to White Horse by the time navigation opened again the following year. This was done; but unexpected difficulties occurred from what is called "frozen ground," i. e. ground frozen not for a few feet below the surface by surface frosts, but frozen to great depths by the intense cold of the glacial period.

There was no time to thoroughly test the entire line for frost by sinking test pits, and such tests as were made were encouraging. But notwithstanding, we met with frozen ground where we least wanted it in actual construction, and it added greatly to the cost and the time of construction. However, on June 8, 1000, the line was finished and trains running between Caribou Crossing and White Horse. By that time too, navigation was

open on Lake Bennett and the Lake was used to connect the two ends of our line for traffic. In this way by the beginning of June 1900 we were working a connected service for passengers and goods between Skaguay and White Horse.

Meanwhile, the rock men had accomplished their task along the shores of the Lake, and the line was ready for the grading and track laving gangs who were transferred from the White Horse end as fast as they finished up their work there. By the middle of July Heney announced that he would be ready to drive the "last spike" on August 1st, and arrangements were made accordingly. Heney invited Mrs. W., the wife of the Major in command of the Northwest Mounted Police at Dawson, to come up the River and drive the spike. Before going to Dawson the Major had been in command at Tagish, and we had all received so many kindnesses from the gallant Major and his charming wife that it seemed particularly fitting that she should put the last touch to our work for us. But the Fates willed otherwise. However, before coming to the last spike, it will be better to give a few incidents of the winter's work.

On the Bennett end of the line there was

nothing but continuous heavy blasting all winter and some remarkable results were accomplished, but the only special event was the sinking of a train with all hands, which happened in this way. A great deal of the heaviest rock work consisted in cutting through the precipitous rock points or capes jutting out into the deep water of the Lake. The debris from these cuttings had to be disposed of and where possible was used for filling in embankments across the shallows at the heads of the numerous little bays between the rock points, thus avoiding curvature of the line as far as possible. One of the largest of these embankments had stood perfectly solid till the track came to be laid on it and heavy work trains began to rumble over it. Then one day while a work train was crossing, part of it suddenly sank under water, taking with it the train except the engine and front cars. Most of the train crew were riding on the engine, so that only one man actually went down with the train. Being a White Pass man he calmly swam ashore, shook himself, and said "Well, I'll be d-d!" All the cars but one were recovered, and that one broke its coupling and got away down the submerged side of the

mountain and for all any one knows to the contrary may be going yet.

Upon investigation it turned out that the shallow water at the head of this bay was caused by the gravel and debris of ages washed down the sides of the mountain and held in place by a submerged shoulder of rock. Probably the heavy blasting may have loosened things up a bit under water, and the jarring of the trains finished the job, but anyhow a large mass of the gravel forming the bottom of the bay slipped off the rock shoulder and so part of the bottom "fell out" and took our train with it. When we rebuilt the line, we ran it on solid rock and dry land round the head of the bay, and took no chances with any more short cuts in that bay. When the ice on the lake melted, we carefully sounded outside all the other embankments, and found gradually sloping formation under water making our work perfectly solid, as time has proved. But it is not every railway that has had a train "go down with all hands."

After the terrible severity of the preceding winter's work on the Summit of White Pass the construction of the Second Section of the Railway from Bennett to White Horse,

although carried on during an Arctic winter, was looked on in the light of a picnic. The gangs had "shaken down," the weaklings had been weeded out, and the men left on the pay-roll had become identified with the "White Pass Railway" and were as proud of it and as keen for its success as if they owned it themselves. This "White Pass" spirit was one of the remarkable things about our later construction days.

I overheard a good illustration of it a few days after the last spike was driven. north and the south bound passenger trains were to meet at Pavy on the shore of Lake Bennett The train I was on got there first and pulled into the siding, leaving the main line free for the other train. While we were waiting for it the passengers, full of interest in their surroundings, got off and began taking snap-shots with their kodaks, gathering wild flowers, etc. One scientific-looking person in spectacles (he turned out to be an Eastern Professor of Geology on his vacation) began chipping away at the rocks after the manner of his kind. Suddenly with great excitement he rushed up to an Irish section man who was tamping ballast into the new track. "My man, I say, my man - do you know that

that broken stone you are using for ballast is a highly mineralized paleozoic formation?" (geology not guaranteed). The Irishman calmly lit a match, held it in his fingers after the manner of his kind till it was nearly burnt out before he relit his short pipe, took a few good puffs, and then said, "Well, phwat of ut?" The Professor saw he had to deal with a benighted man and said, "Why, I want you to understand, my man, that that ballast is probably worth not less than ten dollars a ton!" But the Irishman, instead of dropping dead, looked the excited Professor calmly in the eye and said, "Well, and I want you to undhersthand, Misther Man, that the bist is none too good fur the White Pass. So now ve can give verself a rest wid ver tin dollar rock-so ye can!" And with a snort of indignation he turned to resume tamping the precious mineral into what, with true White Pass spirit, he regarded as his track.

In this spirit the heavy work of the Second Section was pushed through the winter with a romp and swing that made light of all troubles and hardships. The men and horses were well sheltered and fed on the very best, and a spirit of rivalry between the camps increased the pressure under which the work was pushed forward.

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Heney's "Master of Horse" and head of the grading gang was William Robinson, at least that was the name in the family Bible at home. But his real name was "Stickeen Bill" and the camps and all the North re-echoed his unfailing fun and good nature and high spirits and amusing stories. If he had never done anything else he was worth his weight in gold (and that was something enormous, but like Jorrock's, it was a secret between himself and his horse, and nobody else's business), for the spirit he infused into the work. He did not think you could pay too much for a good horse, and would not take a present of a bad one. When he had got the horse he did not believe you could work him too hard (in reason of course). or feed him too well, and his test of a horse's value was the amount of oats that could be got into him and the amount of work that could be got out of him.

He had one fault and, in a tent, it was a serious one. He snored loud enough to overthrow the walls of Jericho, let alone a tent. He was an immense and very powerful man and his chest capacity gave him exceptional powers in this line. When "Bill" was asleep everybody else had to

The antithesis of Stickeen Bill was Charley Moriarity (otherwise known as the "Snow King"), the head of the track-laying gang. He was a silent, red-headed Irishman and the only point he had a common with Bill was his capacity for working himself, and getting others to work. He could distinguish one end of a horse from another, and could "pull him by the face" as he called leading him. But his horsemanship had ended there until one cold winter's day, when they were a long way from camp and supper, Bill succeeded in inducing him to mount a horse. The horses were as keen as their riders to get their suppers and Bill kept riding on a little and "fidgetting" the "Snow King's" horse who couldn't make out Charlev's style of riding in the least, and became half crazy.

When these two had got their gangs transferred from the north end of the line to finish the gap along the shores of Lake Bennett, intense rivalry developed between their respective gangs. The grading gang under Stickeen Bill had of course to complete the road-bed before the track layers could begin work on it, and Charley accused Bill (wrongfully) of holding him back. Bill therefore bet him "a new suit of clothes," that the track layers couldn't catch him, and the "fight was on." The gangs became excited and worked like demons, and the betting

became ruinous. For the last two weeks each gang worked continuously, the men snatching a few hours sleep in sections.

Once the "Snow King" claimed that he had a few feet of his rails projecting beyond Bill's "dump," but before he got the other ends spiked and fish-plated up, Bill got the grade made good and the track lavers lost time waiting for the work train to bring up more sleepers and rails. In the end the graders finished well ahead, and the bets were declared a draw by Heney, to whom the matter was referred. I saw the horses being watered the next morning and they were kicking and squealing on the shore of the Lake like threevear-olds in a pasture. They had come through a tremendous winter's work and for the last fortnight they had hardly had their harness off. There were over 100 of them, and not a sick one or one with a scratch on him amongst them.

The result of the betting between the graders and the track layers was that the track was finished three days ahead of time. When I asked Stickeen Bill how he came to do this he said, "Well, I couldn't help it. That d——d Irishman" (Moriarity) "stampeded on me."

Mrs. W., with a party of friends, was in the "Victorian" on the way up River from Dawson to drive the last spike for us on August 1st. the date fixed for it. But she could not arrive until the night of July 31st and we couldn't wait, as there was too much traffic. So we had to go ahead without her. In default of the lady, we invited the Colonel in command of the American troops at Skaguay and the Officer in command of the Canadian Mounted Police at White Horse and a number of other public officials "of sorts" to cooperate in the driving, and "the boys" insisted that I must give it the finishing "lick." I now quote from my report made at the time:

"July 29th, 1900. I left Skaguay with a "party to drive the last spike this morning. "As we came down the Lake on the 'Aus-"tralian' and neared Caribou Crossing we "could see the track layers at work on the "shore, with about half a mile of track still "to lay at 4:30 P. M. They had to carry "the rails forward from the work train that "followed a few yards behind the rear spike "drivers, mark the sleepers for the rails, lay "the loose rails in place, and then four gangs "of men drove home the spikes (4 spikes to

"each sleeper, 36 to each rail—72 to each "30 feet of track), in a continuous cyclone of "sledge hammers. Then the work engine "pushing a couple of cars of rails would creep "cautiously forward and behind it the fish-"plating gang fished the joints and the new "track was laid where a few moments before "was nothing but the bare grade.

"There was a great crowd at Caribou, in"cluding the White Horse people who had
"come up on the special train for the spike
"driving. They had been waiting some little
"time and were evidently in a jovial mood,
"and welcomed the Skaguay delegation in the
"'Australian' with fraternal and other
"spirits. Very soon the track layers were
"on the bridge over the Lake Crossing, and
"then they were across it, then at 5:30 the
"ends of the rails touched and the gap in our
"line was closed.

"All the spikes were driven except the last. "Heney was called on for a speech, but dodged. "Hawkins and I both had to say a few words, "but no one wanted speeches. Out of cour-"tesy to our 'guests,' being on Canadian soil, "I asked the American Colonel to give the "spike the first blow. The 'Snow King' was "there with his spike and a suppressed grin.

"The gallant Colonel swung the spike-maul "(a long-headed long-handled sledge), in the "approved style and brought it down with a "dull sickening thud on the sleeper some "inches wide of the spike. The populace "howled their glee as the Colonel handed "over the maul to the next man. Warned "by the Colonel's fate, he only raised the "maul a couple of feet and gave the "spike a lady-like tap on the head that "suggested laving carpets. This produced "an ironic cheer. The next man had been "'straightening his eye' while waiting at "Caribou Crossing until he had overdone the "process and saw two spikes, and greatly to "his credit, he hit one of them a good wallop "on the side, but he knocked it flat.

"After that it wouldn't stand up properly "and no one had any luck with it, till it was "a pretty tired spike when it came my turn "to drive it 'home.' It reminded me of a "man that had been round town all night, in "being a great deal farther from 'home' than "when it started, a nice, clean, straight spike "a short time before. The 'Snow King's' smile "broadened to a grin as I took the maul, and "I knew he was thinking of the box of cigars "which custom prescribes as the tribute of any

"luckless 'railway man' who misses the spike. "(Something as unspeakable as 'missing the "globe' at golf). I would have liked to go "behind a tent and take a practice swing, "but 'the fierce light that beats upon' a Pres-"ident forbade, and so thinking 'keep your "eye on the spike' I swung the maul round "with the orthodox full swing. Do you "know the feeling at golf of getting off a "rather good ball from 'a bad lie." That "was my feeling as the head of the maul con-"nected with the head of that disreputable "spike. But I didn't hit it quite fair, and "the spike was bent before, so though it went "half home, it was far from upright for the "next blow. The 'Snow King' however "was as gratified as if he had won his cigars "and most generously whispered, 'You can't "swing on to it that way, tap it home side-"ways"; and I did, with heartfelt gratitude "to our 'Snow King."

"Then everybody cheered and a contin"uous clicking noise announced that the
"films yet remaining in the kodaks were be"ing used up, and there was a lot of hand"shaking. In the middle of this the corner
"of my eye caught the 'Snow King' sneaking
"up with a 'spike pulier' which he stealthily

"applied to the dilapidated last spike. Poor "thing, it didn't take much pulling—it was "glad to go, and Charley quietly marked the "hole with a piece of chalk for the subse-"quent attention of his track men. I was "rather pleased with this evidence of his "strict attention to business even in the "midst of pleasure."*

"White Horse, August 1st, 1900.

"After the spike driving I came here on the "same evening with Hawkins. Before the "White Horse 'Special' could start, it had "to wait for a long train of 'empties' south "bound for Skaguay. These cars, before the "gap was closed, had been working on the "north end of the line. Now that the gap "has been closed, they of course go to Skaguay "to be loaded and in fact formed the first "through train to pass over the line, thus "justifying the comment of one of the 'Snow "King's' Irish trackmen, 'Be Jakers—the "first thrain into this counthry was a thrain "out'!

"Hawkins and I intended to leave for Daw-"son on the 'Canadian' the next morning,

*When I received a photo of the spike a few days later with Heney's compliments, a side light was thrown on Charley's assiduity.

"leaving Heney to make our peace with Mrs. "W. But 'the boys' had got up a farewell "dinner for Heney, and wired Hawkins that "we must be there, and that I must preside. "so of course we had to go back. We there-"fore returned on yesterday's train to Caribou "Crossing. The dinner was to be on board "the 'Australian' and she came down from "Bennett to Caribou Crossing to pick up "Hawkins and myself and the boys from the "north end of the line. In order to prevent "Henev from bolting (he hates being made "a fuss over), he was led to suppose that the "dinner was in my honour. As we steamed "into Shipwreck Bay (now known as Camp "H.), we saw a man riding out of camp as "if the Devil was after him and the boys "shouted, 'By the Lord - Heney has stam-"peded."

"However it was not so, and Stickeen Bill "came on board with the reassuring news, 'I "have him coralled in his tent, putting on a "white shirt." We had a great dinner and "Heney never smelt a mouse—though he "seemed to think it hardly the thing for me "to take the chair at a dinner given in my "honour. But the boys assured him it was "no time for formality. When the dinner was

"over, Hislop got up and proposed Heney's "health, saving that the boys who were so "soon to part wished to mark their appre-"ciation of his never failing kindness and "courage through all the dangers and troubles "of the past two years. Hislop made a mag-"nificent speech (fancy the shy, silent "Hislop). It was one of the finest tributes "to the good qualities of an old and tried "comrade that could be put into language. "Poor Heney was horror stricken—and yet "pleased beyond words. After the ap-"plause had died down, he stood silent before "attempting to reply but soon found his voice "and words, and made a manly reply. "Hawkins then got up and presented Heney "with the gold watch and chain from the "boys.*

"Then Hawkins presented the Engineer "Staff boys with gold souvenir clasps and "medals with the 'White Pass' device (the "open Gateway to the Golden North). Then "there were a lot of clever and witty speeches "(mine was the only dull one and it was short) "and Stickeen Bill was excruciatingly funny. "He preached us a Nigger sermon, and after

^{*}See Appendix for facsimile copy of the Resolutions, etc

"a while a Scotch one, and both were better "than anything I ever saw on the stage. But "there was an undercurrent that was not "laughter to the festivities, and I could see "that Stickeen Bill felt that he must keep "things humming at any cost to prevent "these men who had faced death and had "fought and conquered nature in her fiercest "aspect, and stood shoulder to shoulder for "the past two years, from being oppressed "by the sadness of the coming separation. "Things were kept going till two in the morn-"ing before anyone found courage to break "up the last dinner, and then we all stood up "and sang 'Auld Lang Syne,' and that was "the end.

"As we went sadly ashore, our spirits were "revived by the ludicrous sight of Heney's "men cooks and waiters at Camp H. dressed "in their white uniforms and aprons, danc-"ing 'lady' with the men of the camp on "the shingly beach. The 'ladies' were evi-"dently in great demand and no wonder. "The way they pranced around with their "heads on the shoulders of the stable men, "graders, and track layers would have in-"fused vitality into any effete ball-room.

"I forgot to mention that during the dinner

"the 'Gleaner' on her voyage from Bennett "to Atlin came alongside and fired a salute, "which interfered somewhat with one of "Stickeen Bill's funny stories. 'Give 'em a "few snores, Bill,' some one rudely interrupted. "But, ignoring the suggestion as it deserved, "he stuck to his story and brought it to a "triumphant finish. I regret to say that "under cover of the salute, some of the 'Glea-"ner's' crew are suspected of having taken a "barrel of beer from Heney's store tent to "help out the festivity of the night. Any-"how, the beer was gone, and so was the "Gleaner."

"At five o'clock this morning we all met "for the last time in Heney's tent for break"fast, but it was a failure. We had only "broken up the dinner at two, and at the "best, five o'clock breakfast is seldom gay.
"At 5:30 the 'Australian' took some of us, "including Heney (who goes to Dawson with "us), Hawkins, and myself to catch the 6 "o'clock freight train from Caribou Crossing "to White Horse, while the work train picked "up others, and 'No. 2' took the rest to "Skaguay—and so we separated.

"As we proceeded towards White Horse "on our freight train, Heney got a telegram

"announcing Mrs. W.'s arrival at White Horse "last night, and that she was on 'No.2' bound "for Skaguay. To say that consternation "fell upon us would be a mild way of putting "it. Our trains would meet at Dugdale in "one short hour, and what was worse, Mrs. "W.'s train would be there first, so we could "not 'take to the tall timber.' Hawkins and "I were quite firm and unanimous that Heney "must get off and offer himself up in sacrifice, "while we escaped. But Heney could not "see it in the same light and was provoking-"ly obstinate. What was to be done? We "finally resolved upon a desperate expedient. "'No. 2' being a passenger train would "proudly stick to the main line, while our "freight train humbly crawled into the siding, "which was a long one. There was just a "chance to 'run the siding,' i. e., pull through "without stopping, with a smart switch-"man on the cow-catcher of our engine to "jump off and run ahead and 'throw the "switch' at the far end and let us out on "to the main line without having to stop at "all.

"It was so ordered, and just then we whis-"tled for the siding at Dugdale. We three "guilty culprits lay down out of sight on

"the floor of the guard's van or 'caboose'
"and held our breath as our train dragged
"slowly through the siding. We heard our
"train crew exchanging the light badinage
"of the road with the crew of 'No. 2.'
"Then we felt our trucks run over the points
"on to the main line—our rear brakeman
"dropped off, closed the switch, and signaled
"the engineer, and as our engine whistled 'all
"clear' we got up off the floor and tried to
"look as if that was the way we always
"passed another train." * * * * *

'In due time we all confessed and made our peace with Mrs. W., and she has often laughed since with us over what would have happened if our plan had miscarried, and she had descended on the three of us lying flat on the floor of that freight "caboose."



CHAPTER IV

COMMODORE WILLIAM ROBINSON

To prevent any misunderstanding it may be explained at once that this is our old friend Stickeen Bill in a new aspect—that's all. He came from the good old State of Maine, where the men are all web-footed, and besides that, he was understood to have a cousin who had married a Purser, or other seafaring person. Anyhow, Bill took to water like a duck as soon as the track reached Summit Lake, or rather as soon as the ice on it (which was six feet thick) was too rotten to be safe for his horses.

Besides getting our construction material forward from rail-head at the Summit, Bill, in the spring of 1899, was the general manager of the "Red Line Transportation Company," as he designated the very excellent service which Heney organized to fill the gap between the end of the railway and Bennett before our line was finished. By this service he carried forward from the Summit an immense number of passengers and hundreds of tons of freight, including material, engines,



NAVIGATION ON SUMMIT LAKE



Commodore William Robinson

and boilers for a number of large steamers built at Bennett that spring.

As soon as the ice on Summit Lake became rotten, in the spring of 1899, Stickeen Bill blasted out a channel six miles long through it, which he navigated with a 20foot gasoline launch, towing a "home-made" affair which he had nailed together out of boards and which he called a "dory"—what his passengers called it is unfit to print. Bill was the sole crew of the combined fleet, and the boys used to say that he took all the pretty women with him on the launch while he towed the male passengers behind in the "dory." However this may be, he managed to deliver them all safe at the far end of Summit Lake to his "stage line," which ran from there to Bennett after the ice got rotten.

His channel through the Lake was, of course, full of big cakes of ice which he had blasted loose in making the channel, and he used to navigate his launch through these with as many turns and twists as a "dog in a fair." Thus the "dory" towed behind was often pulled sideways or across an intervening "iceberg," to the terror of its passengers. But Bill with a smile turned a deaf ear to all their expostulations, and when

they threatened to shoot used to re-assure his lady passengers by saying, "Bless you, they won't shoot—they know they can't get ashore without me, and if they *did* the boys would lynch them."

When the rails reached Bennett of course navigation ceased on Summit Lake. But we had to devise some way to carry an immense amount of rails, sleepers, stores, construction plant, and rolling stock down Lake Bennett to Caribou Crossing, where they must arrive before navigation closed, as explained in the preceding chapter. For this service the "Torpedo Catcher" was designed and built at Bennett. She was a huge "scow" with a carrying capacity of about 150 tons, and carried all her cargo upon her deck for convenience of loading and unloading. In shape she was a flat oblong box with sloping ends which, projecting over the shore, facilitated loading and unloading. Having in those days no ship-yards of our own, Bill, as a labour of love, superintended her construction. When her hull was finished it became necessary to decide which end was her stern before her engines, boilers, and propellers could be installed. Bill walked all round her with the foreman shipwright and inspected

Commodore William Robinson

both ends carefully—it was a weighty matter. Finally he said, "I think we will make this end her stern." Whereupon the foreman shipwright, being a prudent man and anxious to avoid future arguments, took a fat piece of chalk from his trouser pocket and marked, in large letters, STERN on that end so that all the world might see for themselves which end it was. In this way the other end became the bow.

This being happily settled, the next thing was to install three ordinary upright boilers, with engines attached, of the kind contractors use for hoisting, pile-driving, etc., which we had to spare These were put as far aft as possible on the overhang of the stern so that she would "sit down" on her propellers and keep them under water when she was light of cargo. The engines were connected with some shafting and three propellers. Then the craft was launched, with steam up and Stickeen Bill at the helm. She was launched in such haste that they omitted to give her a name, but the speed she developed on the trial trip which ensued was such that on her return to shore she was at once dubbed the "Torpedo Catcher," and loaded with rails for Caribou Crossing.

Bill was promoted to the rank of Commodore, and shipped as his engineer a man who had been "donkey-man" on one of the Skaguay steamers and was therefore highly qualified. The responsible post of fireman was allotted to a stranger who was understood to be "wanted" in San Francisco on account of crimes of violence, but Bill did not mind violence, and the candidate looked a good strong man, so he was shipped. Bill then blew his starboard whistle and backed out from the wharf

He was heading south and his course was north, so as soon as he was clear of the wharf he proceeded to show the assembled crowd what he could do in the way of turning his new craft in her own length with her three propellers. He therefore kept his port engine going full speed astern while he went full speed ahead with his starboard engine. As the "Torpedo Catcher's" beam was great in proportion to her length there was a corresponding turning leverage with the engine on one side going astern and the engine on the other side going ahead, so she soon began to pivot round without moving through the water or having any steerage-way. Once she began to turn the 150 tons of rails added to her

Commodore William Robinson

turning momentum, and when Bill finally stopped his port engine backing and went ahead with it and his mid-ships engine, she was spinning merrily and wouldn't stop, especially as her rudders were no use, not having any steerage-way. The crowd ashore saw what was going to happen as soon as Bill realized it himself, and set up a gleeful yell.

There is someone in most crowds on such occasions who fits popular music to the event, and accordingly a shrill falsetto voice struck up the words of the then popular song:

"Waltz me around again, Willie,

"Around, around, around—"
The crowd took up the burden of the song and made it re-echo from the Bennett mountains. Bill, making a virtue of a necessity, stood up and took off his hat and bowed his acknowledgments repeatedly, while the confounded "Torpedo Catcher" indulged herself in a complete extra round turn that was not on the programme. But while he was bowing Bill was also attending to business, and backed his starboard engine enough to check the merry waltz, so that by the time the "Torpedo Catcher" was heading north again he had her under control, and was able to

commence his voyage in earnest amid the cheers of the delighted crowd ashore.

There were no watches kept on the "Torpedo Catcher," because when Bill was at the helm everybody else on board would naturally keep watch in any case, and Bill was always at the helm when the craft was under way. The crew space was under deck aft between the propeller shafts, while the commodore's suite of apartments was in the bow. In due course they arrived at Caribou Crossing, and Bill got his rails ashore and went "up town" (i. e., to the railway camp) for supper.

Upon his return about midnight he found the chief engineer on deck very drunk, and when Bill ordered steam for four in the morning the ex-donkeyman became both abusive and quarrelsome. The fireman hearing his "chief" in trouble came on deck, also drunk, and with an ugly looking clasp-knife in his hand. Bill realized with pain that he was confronted by a mutiny. So he immediately kicked the knife out of the fireman's hand, and incidentally almost broke the hand. Then he took the "mutiny" and knocked its members' heads together violently a few times, while he was thinking what else to do. Acting on

Commodore William Robinson

the theory that it was bad whiskey rather than any innate bad disposition that had caused the trouble, he proceeded with the mutiny to the stern of his craft, one mutineer in each hand, and threw them overboard well clear of the ship one by one, like a man drowning puppies. The "Torpedo Catcher" was only drawing about a foot, and he knew there was only about four feet of water and a sandy bottom, and his idea was that by the time they had regained their feet, recovered from their fright, waded the length of the ship, and gained the shore, the fright and the iey water combined would have sobered them and the mutiny be at an end.

However, while all this was in progress, it struck Bill that his crew once on dry land might try to desert, so he started for the shore to head them off. They not unnaturally misunderstood his motives, and feared another ducking or something worse. So, panic-stricken, they ran yelling "Murder" up the beach, till they met a mounted policeman in scarlet uniform coming to see what was the matter. This check enabled Bill to get up and explain matters. The sobered fireman at once realized that Bill was a far less dangerous companion for him than a policeman

of any sort, and the engineer was also quite willing to let bygones be bygones. So the Commodore and his crew returned in amity to their staunch craft. The first rays of the morning sun peeping over the mountain lit up Bill's rosy smile as he proudly steered for Bennett and another load of rails.

It was not always sunshine on the stormy waters of Lake Bennett and there were times when the "Torpedo Catcher" in spite of her speed could barely hold her own. Bill's rule on these occasions was a simple one—"Stick "by the ship — as long as she can make three "knots an hour. When you can't get that "out of her, tie her up and go at something "else." He was a busy man and could not afford to waste time. But fair weather or foul, there were no more mutinies nor any thought of mutinies. Bill had broken in his crew, and they became so devoted to him that when the "Torpedo Catcher" was finally paid off and put out of commission, the parting of the crew from their respected Commodore was quite one of affection and mutual esteem.

CHAPTER V

CONCERNING BEARS

They were not upon the pay-roll, but they were intimately associated with us on the White Pass just the same. The bears were there before we were—they did not like the gold-seekers—and retreated into their mountain forests, where our surveyors found them. At first there was mutual distrust, but our surveyors were not "after bears" and the bears soon began to realize that they had nothing to fear from the newcomers in their forests.

A bear has two characteristics that never fail—curiosity and hunger. Sometimes one is for the moment uppermost, sometimes the other—but both are always there, and both impelled towards the investigation of our camps. Very soon this became a nuisance to our people. Nothing was safe unless you sat up all night to watch it, and nothing edible came amiss. Bacon, hams, flour, butter, all were popular. But the tinned milk and the strawberry jam—yum yum—any true bear would gladly sell himself to the Devil for one just one go at them. A pot

of jam was easy from the bear point of view if he could once get hold of it—that was the job. But most of the jam came into the bears' country in horrid glass jars with screw tops, and the jar had to be broken and it was difficult to lick up the delicious jam without getting badly cut, but it was worth it—well worth it. On the whole, however, the jam and cream in tins were preferable. It was true that when a tin was squashed flat in the powerful paws its contents would squirt all over the scenery—but even so a good deal would be sure to go on the bear's own fur coat to be licked up first, and then there was the excitement of scenting out every precious drop that had gone astray and licking it up again off the scenery.

When our people began blasting work, the poor bears didn't like it. They were inclined to revise their good opinion of us. Frankly, they were disappointed in us. We had seemed so nice at first, and now all of a sudden we began making such dreadful noises, and shaking the ground, and it was not at all certain that we were not trying to hit them with the stones and rocks that we sent flying in every direction. On the whole the bears thought it was better to keep

at a respectful distance. However, soon they became quite satisfied that they had wronged us. We meant no harm after all. In fact, properly understood, the incessant blasting was a good thing, the bears thought, because it saved a lot of trouble for a hungry bear to be able, under cover of a good healthy blast, to skip out while the men were away in shelter, and steal their dinner pails. They were very nice, those dinner pails, not so entrancing of course as the milk and jam tins, but still a great deal better than berries and ground squirrels, and an occasional salmon, - oftener than not, one that had been dead for a considerable time. The bears soon got to know the foreman's warning shout before a blast and sheltered like our men till the stones had done falling, and then a quick rush for the dinner pails was so often successful that our people had to guard them.

In Alaska, if you want to escape a bear you climb a tree. Elsewhere this would be equivalent to giving yourself as a present to him. But not in Alaska. No Alaska bear ever climbs a tree; he knows the tree would fall down. The reason is because the roots only go down a few inches on account of the

frost in the ground. Hence it is an easy thing to *pull* an Alaska tree over and the bears won't trust themselves to them.

Having heard with surprise of this peculiarity of Alaska bears, two young rod-men fresh from college, in one of our surveying camps, began to practice climbing trees quickly, one evening after supper. Finally they attracted the attention of the engineer in charge of the party, and he asked, "What in thunder are you boys up to?" When they explained, he said, "Well, see here, you "don't need any practice. I was born and "raised in a prairie country where there are "no trees, and when I came up here first I had "never climbed anything but a stepladder. "But just the same I ran for a tree the first "time I saw a bear coming, and a squirrel "started up before me, but I passed him be-"fore he was half way up. You boys don't "need to practice."

The line from Caribou Crossing to White Horse, instead of following the River and Lake, forms the cord of a bow, and goes up the Watson Valley away from the water highway previously followed by both Indians and white men. The wild creatures of this Valley, a few miles back from Caribou Crossing, had

never seen a man and didn't know what a brute he was. They had no idea that he killed for mere amusement. So when our camps were first established in that country in the autumn of 1899, its inhabitants were perfectly tame, thus confirming our old friend Robinson Crusoe, who I think describes a similar state of affairs.

Amongst the old families of the Valley none stood higher than the Bears, or were more universally respected. When our people first moved in, the Cinnamon Bears considered the important question of whether they should call on us or not. Being divided in opinion they consulted their cousins the Black Bears. The latter thought there was no hurry, perhaps we were not the sort of people they would care to know and then it would be rather awkward. But Mrs. Cinnamon Bear, who liked people to take one side so that she could take the other said she had no patience with that sort of narrow talk, and her notion was that they ought to take every opportunity to expand their knowledge by meeting strangers, from whom perhaps they might pick up some new ideas. For her part she meant to call, and if Mr. Cinnamon Bear hadn't the manners to

come with her, she would go alone. And she did.

She called one afternoon soon afterward at our Camp 10, newly established at the head of Watson Valley, but unfortunately there was no one but the cook at home. He explained the situation as best he could and offered her light refreshments in the form of treacle in a tin cup. When she declined he invited her to stay to supper so that she could meet the others, but she excused herself by saving she was afraid that Mr. Bear would be expecting her home. Now the cook knew perfectly well that this was a mere excuse, and he knew that she was dying to investigate the tin cup and its contents but was too shy. So when she said good-bye, he ostentatiously took the tin cup and left it a little distance off in the woods — his bear manners were perfect. Soon afterward he went and got his empty tin cup.

Next afternoon, without waiting for the cook to return her call, she repeated her visit and gave the cook to understand that she thought the treacle was heavenly, but that it was not quite the thing for lady bears to partake of it in public. The cook, of course, rose to the occasion and filled her cup

and left it as before a little way out in the woods, but this time, as they both understood one another and it was merely for the sake of appearances, he didn't take the trouble to go much beyond the camp clearing, and Mrs. Bear on her part made no pretence of not watching where he put it, and in less than five minutes she came back and said how good it was, and he asked her if she liked ham-bones.

Now she had no more notion whether she liked ham-bones than whether she liked Wagner's later operas, so she pretended to be busy admiring the camp and evaded an answer. Having too much tact to repeat his question, he took a ham-bone and threw it absent-mindedly near the edge of the clearing where, with equal absence of mind, Mrs. Cinnamon Bear immediately afterwards found it. She was "picking up new ideas" with a vengeance! But the return of the men to camp broke off her visit for that evening.

Next afternoon when she called round to see how her friend the cook was getting on, she was annoyed to find her cup of treacle on a stump quite close to where the cook was chopping firewood. In a lady-like way she called his attention to his oversight, but

the stupid wretch—so like a man—failed to catch her meaning and left the cup where it was. Of course there was nothing for it in the end but to forget her objection to taking treacle in public and go and get it for herself.

It was the old, old story. She had taken the first step—the one that counts. In vain Mr. Bear hoped that her folly would not lead her into trouble—that her confidence in that cook person might not prove misplaced. For his part he did not trust the man and could see nothing in the least attractive about him. However, that was her affair. So he washed his paws of the whole business, and soon afterwards went to sleep for the winter. But Mrs. Cinnamon kept awake and every night, unblushingly she visited the cook. By the time Spring came again it was, of course, the scandal of the whole Valley, and Mr. Bear said he had had enough of it, and went off on his own hook to the Wheaton Valley with a nice young lady bear that had only just come out that spring.

Of course, people will talk—you can't stop them—and in time the gossip about the friendship of the cook and Mrs. Cinnamon Bear spread as far as Skaguay and reached the ears

of Barley the photographer. Eager for business, he wrote to ask the cook whether there was any truth in the rumours, and expressed a desire to be introduced to Mrs. Cinnamon Bear and to take her photograph. After some correspondence, it was finally arranged that upon a set day in the following week Barley should come over on "No. 1" train and take the picture, which was duly done. But Mrs. Bear's unconquerable shyness with strangers (and cameras) rather interfered with the cook's efforts to pose her effectively. Probably this is the first time that a fully grown wild bear has made an appointment for a photographer to come 100 miles to take her picture.

When the camp was about to break up some pot-hunters from Skaguay thought it would be a great opportunity to get a bear without risk, and they were right so far as Mrs. Cinnamon Bear was concerned. Her acquaintance with mankind was limited to her friends at Camp 10, and she would fall an easy victim to designing strangers. But the pot-hunting sportsmen reckoned without the cook. Like most cooks he had a hasty temper, and when they disclosed their mission by offering him a dollar to entice poor Mrs. Bear

for them, his language conveyed most picturesquely but plainly that he would do nothing of the kind, and that furthermore, if he ever heard of the smallest injury to Mrs. Bear he would hold them personally responsible to such an extent that it would take a clever doctor to sort the pieces. The cook was known to be a man of his word in such matters, and the result was that, so far as we know, poor Mrs. Cinnamon Bear still lives to lament her vanished cook.

When the railway was finished between Caribou Crossing and White Horse the trains were at first a pleasing novelty to the bears, but our trainmen not being as used to these animals as the men living amongst them in our construction camps, failed to appreciate their curiosity. One morning a freight train had been dispatched from White Horse at once after the regular passenger train. The latter after proceeding a few miles had to stop to repair an air brake, and as usual on such occasions the rear brakeman was sent back to "flag" the train coming behind. The stop had been made just beyond a long deep cutting with a sharp curve in it, so that the flagman was soon out of sight. But not for long. Almost at once he re-appeared



MRS CINNAMON BEAR AND HER COOK AT CAMP TEN



flying for his life, and hurled himself breathlessly on to the rear platform of the last car panting, "I d-don't t-think he s-saw me! And if he d-didn't see me then h-he h-hasn't seen me since." The conductor took the flag and went back down the line to see what was up. Round the curve he found an enormous bear standing in the middle of the track, but just then the freight train came in sight and the bear climbed up the side of the cutting and disappeared in the woods. The gravel bank of the cutting showed plainly where he had scrambled down to investigate as soon as he had heard the first train go by.

It was the same with our steamboats on the River. The bears back in the woods used to hear the paddles and come running to see what it all meant. Then the passengers on the steamers used to get excited and hurry for guns and rifles and come wildly running along the decks, loading as they ran, in the hope of getting a shot. This being more a source of danger to the passengers than to the bears, had to be prohibited.

On my first trip up the river from Dawson we were due at Hell Gate about four in the morning, and I left orders to be called before we got there as I wanted to study the channel

and its approaches. Accordingly I found myself in the pilot-house soon after half past three. It was a calm summer morning of brilliant sunshine. As we swung around a bend about a mile below Hell Gate, the pilot who was steering sang out, "See the bear in the river!" and sure enough there was a big fellow about a third of the way over, leisurely swimming for the other shore. He just looked at us and continued his course across our bows. We were going faster than he thought, and it was doubtful if he could clear us. Still he resolutely stuck to his course and would have just cleared us if we had stuck to ours. But at the last moment, before I realized what he was up to or could stop him, the pilot gave her a couple of spokes of port helm and ran over him. As our bow wave ploughed him under, he turned his head and gave a furious snarl. Angrily I expostulated with the pilot at what I called his coldblooded murder. But he said, "Why-he's all right." I retorted, "I suppose you'd be all right, too, if you went under that wheel" (and indeed it looked as if our big stern wheel must smash up anything that went under our flat-bottomed hull). "Well, you watch" he said, laughing. Half hoping he might some-

how be right, I kept my eyes on the big waves in our wake, and sure enough about 50 yards astern up came Mr. Bear, none the worse, but angrier than when he went down. He was simply beside himself with rage. His face was the angriest thing I ever saw. (I wish Barley had been there to take his picture.) He put up one huge forearm out of the water and shook it at us and screamed with rage. Before I had done laughing the pilot said, "You bet that fellow dived till he struck bottom. He wouldn't let the wheel touch "him for a dollar," and so it seemed.

It will be seen that any account of the history of the "White Pass" in our earlier days would be incomplete without some reference to the bears and their relations with our people. Though those days have gone, and bears are now seldom seen from either our trains or steamers, passengers hear innumerable bear stories and become either very keen to see a bear or, in some cases, very apprehensive of doing so. In the summer of 1906 a party of New York ladies and gentlemen made a tour of the Yukon, with a suite comprising a man-servant and two ladiesmaids (French and English respectively). The suite had heard a good deal about bears

on the voyage up to Skaguay, and on landing there their nerves had got a further shock by the sight of two or three bear-cubs playing about in the street. They did not know that these cubs were as friendly and playful as kittens and were kept as an advertisement to attract custom to an "Indian curio" shop. They failed, however, to attract the New York servants, who fled to the hotel and only left it in the hotel 'bus to take the train.

I went to Atlin in the "Gleaner" with the party, and as we were all going on to Dawson together, and were only going to remain one day in Atlin, it was arranged, in order to economize time, that the "Gleaner" should start at once on our return in the evening and dinner was to be served after starting.

We had a busy day and got back rather late to the "Gleaner" and were met at the gangway by incoherent talk of a bear having attacked the ladies-maids and man-servant and some of the crew. But no two stories seemed to agree, and as I caught the chief engineer in the act of winking at the purser, I suggested that we would all be late for dinner unless we hurried up and dressed.

Then I followed the chief engineer to his engine-room to get at the actual facts. It

appeared that some of the stewards and the second officer had found out in the course of conversation with the ladies-maids that the man-servant was in terror of bears (they said nothing of their own nervousness), and then of course it became obviously necessary to give him some justification for his fears. One of the stewards was cast for the part of the bear and the second mate was to risk his life to save the girls. But it was felt safest not to give them any hint of the treat in store, for fear they might by some incautious remark put the intended victim on his guard. The plot had to be modified a little on account of unexpected difficulties in his "make up," rendering it impossible to allow the bear to do more than keep in the background with an old, moth-eaten, torn bear skin that had got past doing duty as a mat and had been thrown out into the store-keeper's woodshed.

After lunch the gallant mate invited the girls to come ashore with him and gather wild-flowers, but they objected on the score of bears. He reassured them by saying they would keep within sight of the boat, and that anyhow the bears never came about in the afternoon, which they spent playing "bridge" or sleeping. No anxiety was shown to secure

the company of the man-servant, as the second mate rightly considered that this was the best way to insure his going ashore with the girls. So off they all went.

The wild flowers were beautiful and the second mate interesting and time passed rapidly, till there smote on their horrified ears the most awful roar from the hill above them, and quite near at hand. A second roar followed almost at once and still nearer. (The "bear" being nervous on account of the deficiencies of his "make up" was rather overdoing his roar business. As a matter of fact bears don't really roar, but of course the main thing is to interest your audience.) The second roar was the mate's cue, so he said to his male companion, "Run for the boat. I will protect the ladies till you return with help." He didn't have to speak twice. the New Yorker was off like a rabbit.

But the "ladies" unluckily showed more inclination to trust to their heels than to the second mate, and were off, too, and he couldn't rally them. They simply flew when they saw a great hairy-looking animal in the background emitting a third of his justly celebrated roars. The second mate had to make the best of a bad job and re-arrange the plot

on the spur of the moment. It was his part to be a hero, so as the ladies wouldn't let him save them, of course he had to die for them. So he shouted out, "Save yourselves, I will keep the bear engaged till you are safe," and jumped for a small dead branch of a tree (that could be depended upon to break with a loud crack), and when it broke he fell to the ground before their distracted eves as they fled. He must have been hurt by his fall, they thought, because he failed to get on his feet again, and in another moment he and the bear were rolling over and over on the ground making the most blood-curdling yells (between their fits of laughter), till finally the second mate got up and said, "There! that will do; I guess I'm dead all right—and anyhow your skin has come off." Then he sneaked on board by way of the engine-room gangway, while the fugitives were busy explaining his untimely but gallant end.

A few minutes later the steward who had acted the bear strolled on board whistling, "Are there any more at home like you," and spent the rest of the afternoon comforting the agitated girls, and telling them not to mind about the second mate as the Company had lots more of them.

Having got these facts, I dressed quickly for dinner and sat next the lady who claimed the services of the French ladies-maid. The talk, of course, was all about the dreadful calamity, and I expressed a fear that she had not found Elise as efficient as usual and wondered how she had managed to get her hair so nicely done. But she was so upset about the second mate that I had to explain, "Oh, he's all right. You see the bear was a friend of his—in fact, that's the bear handing you the vegetables." Thereupon the "bear" and the vegetables vanished, and the truth came out.

But we all agreed that it would be too cruel to deprive Elise and her companions of their narrow escape, so we kept the facts to ourselves, and doubtless this blood-curdling "bear story" still continues to thrill the upper circles in New York and Paris servants' halls, authenticated as it is by three such prominent members. Still—things are not always what they seem; and it is evident that "nature faking" is not confined to magazine writers, but has its votaries also amongst the steamboat men on the Yukon.

PART II WORKING CONDITIONS



CHAPTER VI

RAIL DIVISION

Before the railway was completed, we had the usual prognostications of trouble in working the line, especially during the winter. The "wise men" who make it their business to volunteer advice and opinions in such cases, were quite emphatic about the impossibility of our attempting to run trains in winter-time over the storm-swept White Pass. We were told what the storms were like by men who had never been on the Pass in winter, and who possibly forgot that we ourselves had built the line over the Pass itself during the previous winter.

While we were receiving these warnings on the one hand, we were urged by some of our English friends to keep down the first cost of the line at all hazards and to build a "light tramway" rather than a railway, and not to be so particular about our gradients. These "economists" apparently supposed that if a line was "located" in the first instance for a cheap line with heavy gradients, it could afterwards be changed,

and failed to understand that this would involve "re-location" and rebuilding of the line. We used to wonder how these economists would propose to work their suggested light tramway with heavy gradients, especially during the winter, and how they would avoid accidents on their heavy gradients when they tried to run heavy loads over their light tracks in the busy summer season, and how many tons one of their light engines would be able to pull up the hill, and what the cost per ton would be.

The railway line was built in the belief that the line that would pay best was a well located one, with the lowest possible gradients and a very solid roadbed over which heavy engines could haul heavy loads up the hill in summertime, and which would admit of modern appliances for snow fighting in the winter. It was believed that with the aid of such appliances the line could be kept open throughout the entire year in spite of what the "wise men" said.

But the first essential for successful snow fighting on a railway, especially in the mountains, is a solid roadbed, able to stand the enormous strain involved in the working of a big rotary snow plough pushed into the



EXAMED OF PASSENGER TRAIN WAITING AT BENNET STATION WHILE PASSENGERS LUNCH



Rail Division

heavy snow banks and drifts by two and sometimes three heavy locomotives. rotary snow ploughs are not common in England, it may be well to explain that they consist of a long, narrow sort of house on trucks, enormously strong, and containing a large boiler and powerful engine for working the rotary knives. These knives are set in the form of a wheel on the front of the machine. having a large diameter and revolving at right angles to the track at great speed inside a hood, but open at the front where the knives come in contact with the snow bank or drift. The revolving knives slice away the snow as the "rotary" is pushed forward by its attendant locomotives, and the snow as it is sliced away by the knives is thrown into the hood and whirled away by centrifugal force to a great distance clear of the track. These machines can deal with snow-banks up to about 12 feet deep, but in deeper snow they "tunnel" or choke themselves, and it is then necessary to prepare for the "rotary" by trimming down the snow-bank with shovels to about 12 feet deep.

The speed at which a rotary can eat its way through the snow-drifts of course depends on the depth and hardness of the snow, but

varies from one to about five miles per hour. When the snow is drifting, or inclined to slide, it fills in the cut made by the rotary in a few minutes, and this is especially true on the White Pass where the storms are so fierce. Consequently it is necessary to have the train for which the rotary is clearing the track follow the rotary through the cuts very closely, and as the line is almost immediately blocked again behind the train, it is obvious that once a train has started there is nothing for that train to do but keep treading on the heels of the rotary until it gets to the other end. Sometimes in heavy snow fighting the rotary, or one of its attendant locomotives. runs short of water at a distance from a water-tank, or breakdowns may occur which delay proceedings.

We had a trying experience in our very first big snow fight, which began on December 17, 1899, and lasted continuously for a month. The drifts were from 8 to 12 feet deep all the way from Skaguay to Bennett, the wind blew a continuous heavy gale from the north, and the temperature ranged from 30° to 60° below zero. During this month sometimes a rotary or train crew would be on continuous duty for over 48 hours. But even this record



WHITE PASS ROTARY SNOW PLOUGH IN ACTION



WHITE PASS ROTARY SNOW PLOUGH AT REST



Rail Division

was surpassed in the terrific storm of March 7, 8, 9, 10, and 11, 1900. On that occasion the rotary and train crew leaving Skaguay on March 7th reached Bennett (40 miles) on March 11th, after 105 hours' service of which oo was continuous. The passengers of the train testified to the exertions of the crew in the following testimonial: "Lake Bennett, "B. C., March 11, 1900. On board passen-"ger train, W. P. & Y. R.: We, the under-"signed passengers, deem it only a slight "matter of justice to express our thanks to "Charles Moriarty, Road Master; Murray "B. Miles, Conductor; Robert Simpson, En-"gineer; J. C. Quinlan, Conductor of Rotary, "and all other members of the train crew for "the perseverance they have displayed in "landing us safely here; notwithstanding "their having been on duty constantly with-"out rest or sleep, for over ninety hours, in "one of the hardest blizzards that any of us "have ever experienced."

The following extracts from our official reports give a pretty clear idea of what 90 hours of continuous service on a rotary snow plough involves in the way of work, danger, and hardship:

"Skaguay, Alaska, March 27, 1904. At

"2:30 P. M., Friday, March 25th, a snow-"slide came down at Mile-post 15, 500 feet "long, 10 to 38 feet deep. It was found that "the snow contained a great deal of water, "this causing it to pack like ice. The section "crews were bunched and men put to work "to cut it down to 12 feet, so that the rotary "could handle it. The rotary ploughed into "the slide on the north end about 40 feet, and "encountered a boulder about 3 tons. She "stripped herself of the knives and the boul-"der was pulled out with chain. Afterwards "the rotary was sent into the slide again. "This time she made about 15 feet, encount-"ering another boulder weighing about 5 tons. "Any remaining pieces of knives that she had "on her wheel were knocked off by this second "boulder. This boulder was disposed of in "the same manner as the first one. After dig-"ging out about 15 feet more of the slide, we "encountered another boulder, weighing "about 10 tons, of a triangular shape. This "boulder was disposed of in the same manner "as the former ones. The snow was so hard "and the rotary was wedged in the slide so "that in taking the slack of the coupling the "front head beam on Engine 61 was broken. "Word was then sent to Skaguay to start

Rail Division

"the other rotary and two more engines out. "We again put the first rotary outfit into "the slide. She was doing as well as could "be expected until she broke the cross timber "that the casting is fastened to on the rotary, "between the rotary and her tank. This "put the machine out of business and we had "to dig out the balance of the slide with the "rotary from Skaguay. In some places the "men had to cut the slide down 26 feet. It "was a very dangerous place to work and the "men were afraid that the slide would cave "in on them. However, we managed to hold "them up to the work and got through the "slide at 1:00 A. M., arriving at Skaguay with "Train No. 2 at 2:30 A. M., Saturday, March " 26th."

"Skaguay, Alaska, January 24, 1906.
"A severe cold snap set in on the Rail
"Division on January 19th. Thermometer
"dropped from 15° to 48° below between
"Skaguay and White Horse, and a strong
"north wind blowing, and drifting snow
"between Fraser and Glacier.

"On the 20th, thermometer dropped from "20° below at Skaguay to 64° below at White "Horse; wind increasing in velocity.

"On the 22d, thermometer ranged from

"22° below at Skaguay to 68° below at White "Horse, and the wind still blowing hard from "the north between Fraser and Skaguay.

"On the 23d, 18° below at Skaguay to 56° below at White Horse.

"The rotary has been making trips as far "as Fraser, and owing to the severe cold "weather it has been almost impossible for "rotary crew to keep from freezing in the ma-"chine. To-day it is from 14° below at Ska-"guay to 48° below at White Horse, with "a light snow and a very strong wind from the "north, and drifts all the way from Fraser to "Skaguay. Snow reported 15 feet deep on the "track on north end of section 3, and south "end of section 4; or between the tunnel and "steel bridge. This is four feet deeper than "the rotary can handle, and it is so cold that "it is impossible to keep men out to cut down "the drifts without freezing.

"The rotary crew have great difficulty in "keeping the oil on the machine owing to "the oil cups freezing up. We have had to "put an extra engine crew on rotary and re-"quire them to keep torches burning around "the oil cups."

Having now acquired some idea of what snow fighting means, the reader will perhaps

be better able to share the wonder of our officials as to how our English "economist" friends would propose to keep things moving on their suggested light tramway with heavy gradients; and will also realize that there was some foundation for the gloomy forebodings of the "wise men" who told us we could never keep our track clear.

We thought we could; and to that end we equipped ourselves with two powerful rotary snow ploughs, and took special pains to select picked men to run them. One of these men was H. R. Simpson, better known as "Rotary Bill," who was the engineer on the rotary mentioned in the passengers' testimonial. We shall come across him again before closing the story of the work on the Rail Division.

Enough has perhaps been said to make it clear that "snow fighting" is not an occupation to be attempted by anyone lacking in courage, stamina, quick resourcefulness, and iron nerve. If anybody doubts this let him imagine himself the engineer of a rotary on the White Pass. He leaves Skaguay with, say, three snorting monsters of locomotives behind him pushing him up the mountain. The first snow-bank is soon reached and the rotary started. As soon as it is running

steadily its engineer gives the signal to the snorting monsters behind and they commence to force him relentlessly into the hidden dangers of the snow-bank. But a rotary engineer is not supposed to worry about hidden dangers—he confines himself to the situation in hand, regulating the speed of his revolving knives and the speed at which he is being pushed into the snow according to the exigencies of the moment. There are many places on our line where the roadbed is notched into the mountain side and where nervous passengers, even in summer, prefer not to look down into the canyons below. But the engineer on the rotary must not waste his time speculating what would happen if there were a rail loose under the snow-bank into which the three monsters behind are blindly forcing him forward. It is equally futile to wonder what would be the outcome if there should be a fallen rock or boulder hidden in the snow to throw him off the track, or if harder snow should be suddenly encountered and the monsters behind should push him into it faster than he could "eat it up," which would mean either forcing him up in the air or sideways off the track. Neither is it of the slightest use speculating about the result

should the snow on the mountain above begin to slide.

One's ears are deafened by the noise of the monsters snorting behind and by the roar of snow as it is whirled through and out of the hood. In the midst of this bewildering din stands the rotary engineer with his hand on the throttle and his eyes all round him, ready for anything, but expecting nothing. Clearly it is no place for a weakling. Then perhaps the water runs short, and your oil cups freeze, and your feet freeze, and you have been 48 hours on your legs, and the "worst is yet to come." But still you must stick to it like a bulldog and get the train through. And you do—if you are a White Pass rotary man.

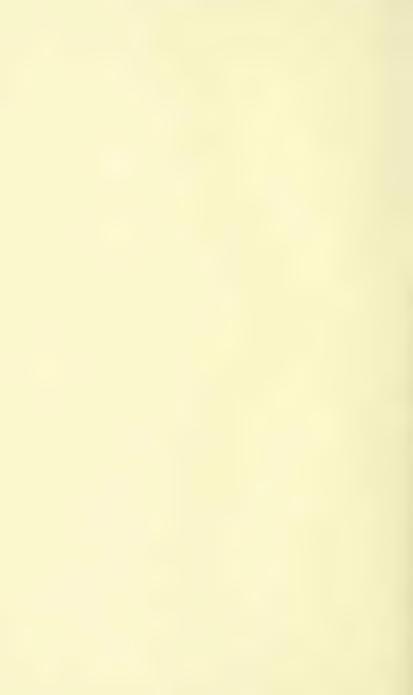
Sometimes, in spite of all precautions, there is an accident, though these have happily been rare and unattended by serious injury. The most serious was the derailment of rotary No. 2 by an avalanche near Mile-post 18 at noon on Sunday, February 12, 1906. Simpson (Rotary Bill) was the engineer in charge of the rotary, and locomotives Nos. 61 and 62 (two of our biggest) were pushing him through a five-foot snow-bank at the rate of about five miles an hour, when suddenly the snow

on the mountain-side above began to slide, and before the locomotives could back the rotary clear she was caught in the avalanche and carried with it off the track and over the side of the mountain. Luckily she broke her coupling to the leading locomotive, so both locomotives remained on the track. The avalanche in striking the rotary turned her clear over, and she was left with her "feet" (as they call locomotive wheels) in the air. Simpson was not hurt, but his fireman and another man on pilot duty in the rotary were slightly injured. However, a few days in our hospital at Skaguay set them right. tender of the rotary was got back on the track again, but the rotary itself had to be taken to pieces where it lay in the deep snow on the side of the mountain, as there was danger of starting the snow sliding again if any attempt were made to right the rotary preliminary to hauling her up on to the track again. The pieces, of course, were rebuilt at our Skaguay shops, so that in a few days Rotary No. 2 was back in service again, none the worse for her slide down the mountain.

It must not be supposed, however, that all our troubles on the Rail Division are confined to snow fighting and the winter-time.



ROLARY SYOW PLOTGH NO 2, OVERTURNED BY AVALANCHE



In spite of the utmost vigilance and care, a broken coupling, a defective air brake, or a hundred other similar trifles which cannot be foreseen or guarded against, are capable of creating a serious emergency on a mountain line like the White Pass. Hitherto our men's nerve and resourcefulness have proved equal to the emergencies that have arisen, and have avoided any serious accidents. But the following cases illustrate how narrow is the margin sometimes between an accident with trifling results, and a catastrophe.

On September 10, 1901, Train No. 2, from White Horse to Skaguay, reached the summit of White Pass "on time" and proceeded to run down the 20-mile hill into Skaguay. It happened to be a heavy train on account of a large number of passengers who had arrived at White Horse that day from down river in the course of the regular autumn exodus. Most of the passengers were very keen to see the line between the Summit and Skaguay, and for that purpose a great number of them, in spite of the warnings and remonstrances of the train crew, crowded onto the rear platform of the rear coach. Numbers of others who had failed

to secure a position on the rear platform, established themselves in the rear end of the coach, while scarcely anybody happened to be in the front end of that particular coach.

Just south of the tunnel, the line crosses a deep rocky canyon on a high bridge. Coming out of the tunnel onto this bridge there is a momentary glimpse on the left of the view up the canyon, then the interest suddenly shifts to the view on the right down the canyon. The rear coach had got about two-thirds of the way across the bridge, when Engineer Mackenzie, on Engine 50 in charge of the train, noticed that the forward trucks of the rear coach were off the rails. The engine and all the train but about the two last coaches were off the bridge, and Mackenzie had his train so well in hand that he could have stopped in the length of a coach. Instinctively he reached for his air brake, but before his hand could obey the instinct, his mind taught him that as soon as he used his air brakes, he would throw his rear coach (whose front trucks were off the rails) "skew-ways" across the track, with the probable result of throwing it off the bridge into the canyon below. Then he did what required some nerve. He deliberately kept his train running at the

same speed until he saw his rear coach was off the bridge and on solid ground. Then, and not till then, he used his air brakes, with the result that his rear coach was in fact thrown skew-ways across the track and its front trucks went into the left hand ditch, so that the coach toppled over inwards against the precipitous mountain-side. No one was hurt and no damage done beyond some broken windows. But had Mackenzie's brain not worked quickly enough to check his instinct that rear coach and its 50 occupants would have gone into the canyon, and a catastrophe would have resulted that would have engaged the attention of the world in the following morning's papers.

Investigation showed that the roadbed and rails were in perfect order, and the truck and entire coach also in perfect condition. The left hand rail showed where the wheels of the truck had gradually mounted the rail and dropped off onto the sleepers outside, but no possible cause for their doing so could be discovered. We were finally forced to the conclusion that the weight of passengers at the rear end of the coach, and suddenly transferred in watching the scenery from the left to the right side of the coach, must

have caused it to lurch and jump the track. This view was strengthened by the fact that the coach happened to be one of our earliest ones and only weighed a little over twelve tons, which is very much lighter than our recent coaches. The accident resulted in a strict enforcement of our rule prohibiting passengers from standing on the coach platforms, and in our selling our light coaches for service on lines where the gradients and curves were easier, and where the consequences of derailment would be less serious.

Early in August, 1905, we had completed a big embankment with a dry retaining wall of large stones and boulders, for the purpose of straightening the line at a curve where the snow "pocketed" every winter, and also for the purpose of doing away with bridge 17 D. The new embankment and dry wall was 56 feet high at the highest point, and averaged about 35 feet high for about 300 feet in length. The embankment was completed on July 22d, and after allowing a couple of weeks for it to settle the track was transferred to it from the old line on August 6th and most carefully tested before being opened to traffic. In the

first six days 26 heavy trains and 70 locomotives ran over this embankment and found it perfectly solid. On the night of August 11th a heavy goods train passed over it on its way from Skaguay to the Summit. This train, besides the regular train engine, had two "helper" engines to take it up the hill. Arrived at the Summit these two engines were detached and proceeded about midnight to drop down the hill to Skaguay. Engine No. 66 was leading, in charge of Engineer Simpson (Rotary Bill). As the night was very dark and it was raining in torrents, he was running very cautiously and keeping a good look out for fallen rocks, which are the bête noire of an engine-driver on a mountain line on a dark wet night. When he got to the new embankment at 17 D, which he had passed over with the heavy train only a short time before, he thought he saw through the dark and the driving rain that "there was a sag in the track towards the far end." Instantly he blew a warning whistle to the engine following him down the hill, and ordered his fireman to "jump," while he himself set his air brakes and eased his valve. By this time he was well on the embankment, and having done everything

possible for the safety of his engine and of the engine following him, he jumped from his engine just as it ran onto the "sag." The next moment the engine and the "sag" and a good part of the new embankment "weren't there." They had gone down the mountain. Simpson escaped without injury, and Fireman Moriarity got off with a broken rib. Before morning our track-layers had the track relaid on the old line so that traffic was not interrupted.

Daylight revealed Engine No. 66 on her back about 100 feet down the steep mountain-side. Her tender was still coupled to her. On August 12th and 13th our men built a temporary track down the mountain to the tender, and by the evening of August 13th had the tender safe and sound back on the main line again. But the engine was not so easy, because the side of the mountain where she lay was so steep that any attempt to turn her right side up would have started her off down the mountain-side for an indefinite distance. It was therefore necessarv to excavate the mountain side behind her till space had been made to turn her over safely and put her on her "feet" again. This having been done, the track used for

the tender was extended to the engine and two immense sets of blocks and tackles with steel wire ropes were attached to her. the gradient of the temporary track was 62} %, i. e., a rise of 62½ feet for every 100 feet of track, it will be understood that these tackles were necessary, bearing in mind the fact that Engine No. 66 weighed sixty tons. The hauling ends of the wire ropes from the two sets of tackles were attached to Engines 62 and 50 respectively and the former started to pull up the track towards the Summit, while the latter started to pull down the track towards Skaguay, keeping an even and steady strain on the two sets of tackles, which were of course carefully watched and tended during the operation. Foot by foot Engine No. 66 mounted the temporary track, and before long she was safe on the main line once more. After a couple of days in our Skaguay shops she was back in service again, none the worse. All the work was done by our regular gangs of bridge-men and sectionmen, and all the material used was taken up again and saved, so that the cost of this accident was merely nominal. But if that embankment had gone out while a heavy train instead of a single engine was passing

over it, we should not have got off so easily.

Investigation showed that the continuous torrents of rain, which had lasted for over a week previous to the accident, had caused the interior of the embankment to settle, with a disturbing effect on the large boulders forming the lower portion of the dry retaining wall. The whole thing must have occurred very shortly before Engine No. 66 reached the embankment, because the "track-walker" had only just left there about half an hour. As the result of this accident we continue to use our old line in spite of the winter snow pockets, but we have filled in bridge 17-D solid so that the snow fighters have a better track to fight on.

When the railway was first finished our scale of charges averaged about 10 to 15 per cent. of the amounts the public had been previously paying for very much worse service, and of course on heavy or bulky articles, such as machinery, there was no basis for comparison, because such things could not be brought in at all before the railway was opened. The rush of the public to avail themselves of our facilities taxed our carrying capacity to the utmost. People began

trying to bribe our men to give their goods preference or priority over others, while at the same time these same people raised an outcry against our "extortionate charges."

We suffered in this respect for the sins of the steamboat owners, who brought the goods to us at Skaguay and took them from us at White Horse. Their steamers carried cargo on what is known as the "weight or measurement" basis, which is universally employed by vessel owners all the world over, to protect themselves in carrying light but bulky goods. "Weight or measurement" means that the vessel has the option of charging by the ton weight or of calling 40 cubic feet a ton measurement. Hay, for instance, would thus be carried on a measurement basis, while coal, say, would be carried on a weight basis. This is perfectly fair, if the measurement is fair. But the difficulty is for the consignee to check the measurement to see that he is not being overcharged, and in the early White Pass days the overcharges by the steamers on measurement goods were outrageous. The story is told of a wagon which was driven down to the wharf in Seattle for shipment to Skaguay. The horses were taken out and the

wagon left on the wharf. The steamboat people measured it *before* they took the pole out and on reaching Skaguay presented us with their bill of charges, which we had to pay and treat as "back charges" in collecting the freight from the consignee.

From the very first everything was charged on a weight basis on our railway. so we had nothing to do with these measurement overcharges. But the consignees, perhaps not unnaturally, blamed us as if they were our charges. Finding our protests to the vessel owners unavailing with respect to improper measurement, we finally took a determined stand and flatly refused to join in through bills of lading except upon a strict weight basis, and no longer "took up back charges" based on measurement. Of course this involved classifying the goods. but it did away with the measurement overcharges. However, we got no credit, and the public continued to abuse us and denounce our "extortion."

We had an amusing case of this in Atlin. The good people of that district shortly before the close of navigation one autumn got up a "Gun Club" and sent out a "rush order" for a supply of clay pigeons. These,

however, did not arrive at Caribou Crossing till after the close of navigation, and consequently had to be warehoused there till the following season. When they reached Atlin on the first boat, Jimmy Lipscombe, our agent there, notified the Gun Club of their arrival, and they sent down the town drayman to pay the freight and get the pigeons, which he did.

There are people everywhere who regard any money paid by them in taxes or to a railway company as something that they have been swindled out of, and in Atlin such people have always seemed particularly numerous and indignant. They had been rumbling and grumbling all winter about the "White Pass high-handed system of robbery," and were only waiting for a good instance of it to explode. Plenty of them belonged to the Gun Club and scrutinized the freight bill on the clay pigeons. It was the usual sort of document, made out in the usual sort of abbreviated hieroglyphics adopted by billing clerks all over the world. No one presumably ever saw a freight bill made out in plain language. However, the Atlin people managed to make out the gist of the document down to the last item which read "C. S. on pigeons 25c." They knew the last

portion to denote that there was 25 cents to pay, but "C. S. on pigeons" puzzled them till the butcher said "C. S." always means "cold storage." Then the explosion occurred. At last they had caught us in the act! We were so ignorant as not to know that the pigeons were clay pigeons, and so dishonest as to pretend falsely that we had kept them in cold storage all winter when everybody knew that we had no cold storage plant at Caribou Crossing. Here was the chance to make us sit up. Accordingly the matter of our flagrant overcharge was referred to the "Atlin Board of Trade" for appropriate action.

The Atlin Board of Trade is a nebulous body, composed, so far as I understand, of everybody who has nothing better to do than attend a meeting. The editor of the local paper was its secretary, and got up the meetings apparently with a view to filling his columns. Judging from the reports in those columns the people attending the meetings could neither be bought nor intimidated, and found themselves in perpetual antagonism with organized attempts to trample on the liberties of "the peepul." So they were able to approach our cold storage charge in a fitting spirit.



Four Emini Train Crossing Cantillever Bridge Near Strain of White Pass



Before the meeting some of them sounded Jimmy Lipscombe as to what he thought of anyone who would make a cold storage charge on clay pigeons, and Jimmy speaking in his private capacity and not for publication, admitted that personally he thought such a charge would be improper.

When the meeting convened it was evident that the champions of the liberties of the people were in their very best form, and the speeches denouncing us were hot enough to warrant cold storage.

At last, when everybody had uncorked his views, the secretary took the largest sheet of folio paper in town, wrote the date at the top, and the heading "The Atlin Board of Trade in Meeting Assembled," and then he "whereas'd" himself all down the front page, setting forth our iniquities in general and in connection with clay pigeons in particular. Then he turned over the page and took a fresh start, "Be it therefore resolved" and off he went with a string of resolutions demanding restitution of our ill-gotten plunder in general and of the 25 cents for cold storage of clay pigeons in particular, and wound up at the foot of the page with "Be it fur-"ther resolved that the secretary be and he is

"hereby instructed, failing full restitution "and satisfactory assurances as to the future, "tobring the facts before the Right Hon. the "Minister of Railways, and before the Attor-"ney General of this Province" (and a lot of "other potentates set forth), "with a view to "securing such legal proceedings as may by "them or any of them be deemed proper." Then the document was read and carried with acclamation and the meeting adjourned.

The secretary enclosed a copy of this document in a portentous-looking envelope and launched it at the unsuspecting Jimmy next morning in our office, and intimated that prompt action was expected. Jimmy's smile broadened as he read. Then he took a red ink pen and wrote upon the virgin third page as follows:

"G'tlmn.:

"Pl's. note letters 'C. S.' herein rf'rd to signify Caribou Storage. There is no cold storage ch'rge.

"R'sp'ctfully,

"Jas. Lipscombe, Agt."

And that was the last we heard of the Atlin Board of Trade for some time.

CHAPTER VII

RIVER DIVISION

When the line was finished to White Horse in the summer of 1900, we supposed in our innocence that our troubles were over—not knowing that one's troubles are never over. Our idea was to take things easy and rake in the dollars lawfully accruing to us for carrying the passengers and goods through their worst dangers and difficulties with safety and dispatch. At White Horse we turned them over to an irresponsible mob of river steamers that competed for the business in much the same fashion as cab-drivers outside an ill-managed railway station. Innocent passengers were fought over, through shipments of goods were split up, Customs papers lost, goods stolen on the boats, and in short perfect anarchy prevailed. Many of the boat owners were not responsible financially, so that the passengers with through tickets and the goods owners with through bills of lading naturally preferred to make their claims against us, leaving us in our turn to recover from the delinquent boat owners — if we could

Before the end of the season of 1900 it was obvious that in self-defense we must organize our own river service. This we accordingly did during the coming winter, building our own steamers at our own ship-yards at White Horse. When navigation opened in 1901, we began running these boats under our own flag and have continued to do so ever since. This service we call our River Division, to distinguish it from the rail portion of our service, which we call our Rail Division.

The distance by river from White Horse to Dawson is 460 miles; allowing for detours to landing-places, wood-vards, etc., the round voyage is nearly 1,000 miles, of which half the distance has to be made up stream against a current never less than 5 miles an hour and in some places more. One might suppose that the disadvantage of an adverse current on the up-stream voyage would be offset by the favourable current on the down voyage. But on the contrary a steamer's greatest effort on the down-stream voyage is put forth in backing. The turns are so sharp, and the channel so narrow, and the current so swift, that it is impossible to keep a boat in the channel with the rudder alone,

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especially as the effect of the rudder on a flatbottomed boat is to make her "slide," like a motor-car skidding. Therefore, at every turn where the channel is at all narrow or shallow, it is necessary to back the engines hard, thus holding the boat stationary against the stream while she slides at an angle into the desired position.

The operation requires the greatest skill and judgment, because often it is necessary to place the boat almost to an inch in taking her through a crooked, rocky channel where the stream is running like a millrace, and usually diagonally to the ship's course. The speed of the ship through the water, her speed over the ground, and the set and the speed of the stream, all have to be taken into account and combined successfully from moment to moment in the pilot's brain in order to enable him to move his helm and engines at the exact moment, and in the exact manner required to give the desired result. There must not be an instant's delay in the response of the engine to the pilot's order. This is one cause of the traditional feud between the pilot-house and the engine-room on "swift-water" steamboats. A pilot or captain may accuse an engineer of

breaking any or all of the Ten Commandments rather than even hint that he is not quick on his "bell." There are six rudders, three between the stern paddle-wheel and the hull and three behind the wheel, so that whether the wheel is going ahead or backing it throws a powerful stream against three rudders, the effect of which is that the steering of the boat does not depend, as in other craft, on her having steerage-way, but on the movements of the stern paddlewheel.

It is of such vital importance to have the steering quickly and accurately done that going down stream, or in a difficult place coming up, a "swift-water" pilot would as little think of trying to instruct a quartermaster how to steer for him as how to make a difficult shot at billiards for him. The rudders are controlled by an ingenious steam steering gear, designed and patented by Captain Turner, one of our captains, which is so rapid in its action that the ordinary hand steering-wheel (which is always kept connected in case of accidents) spins round so quickly that it is impossible to see its spokes. It will be understood, therefore, that a voyage down stream in a "swift-water"

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steamboat means concentrated attention by the pilot and engineer on watch.

People read Mark Twain's accounts of steamboating on the Mississippi, and think they know all about river steamboats, and in the early days on the Yukon a number of Mississippi pilots and other steamboat men were brought up to run boats, and some of them remain to this day and have become good "swift-water" men — after they have learned the business. But it is quite a different game to what they had been used to, and most of the Mississippi men, in spite of the better pay on the Yukon, drifted back again to their sluggish, muddy, old "Father of Waters." It was the same with the Mississippi type of boat. A number were built for the Yukon in the early days, but experience showed that they are hardly adapted for "swift-water" work.

Until the railway was finished to White Horse, the only way to get a steamer of large size on the Yukon was to build her at Portland, Seattle, Victoria, or some similar place, and send her by open sea 2,500 miles to St. Michael at the mouth of the river, and thence 2,100 miles up river brought her to White Horse. These early boats were either

of the regular Mississippi type or else resembled the "swift-water" boats in use on the Snake, Willamette, or upper waters of the Columbia river.

But the service between White Horse and Dawson involved special features which demanded a special type of boat, adapted to carry her load down stream on a very light draught and come back empty against the stream. The first essential was enormous backing powers, without which no boat could safely carry a heavy cargo down the rapid stream. Then for the long voyage back against the stream it was essential that when the boat was empty her wheel should nevertheless be sufficiently immersed to take up the power of the engines without racing. To get this result without having the wheel so deep as to make her sluggish in backing when loaded was a difficult problem, and we evolved a special model for ourselves with the boats we have built at White Horse.

These boats carry 100 first-class passengers and about 300 tons weight of cargo on a draught of water of about 4 feet, and have a mean draught of about 18 inches without cargo. They steam about 15 miles an hour through the water, and can almost throw a



WHITE PASS RIVER STEAMER BUILT AT WHITE HORSE



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man off his legs when they back suddenly. The cargo is all carried on deck a few feet above water, for convenience in loading and unloading, and with the engines and boilers. is housed in by a light structure known as the freight-house, about 11 feet high, covering in the entire boat except the bow. On top of this freight-house is the passenger accommodation in a sort of second story, and on top of this again, on the "Texas" or upper deck, is the galley and accommodation for the officers and crew other than the engineers and firemen, who live on the main deck. On top of all is the pilot-house, some 35 feet above the water and commanding a clear view all round. Such craft are obviously not adapted for rough water, and yet on Lake La Barge they have often to contend for thirty miles with heavy gales and heavy seas, and it is wonderful how well they do it.

Ordinary craft, when confronted with less water than they will float in, have to remain on the near side of the obstacle. The captain says to himself, "Four into three and a half won't go—and I can't go either." But the Yukon practice is different. Up there "four into three and a half" has got to go, and so has the boat drawing four feet of

water when there is only three feet and a half across a bar. The first thing is to get the boat as far as she will go of her own accord, and then to *make* her go the rest of the way with artificial aid. After the boat is finally hard and fast aground, the methods pursued vary according to circumstances.

Sometimes the bar is loose enough to admit of washing it away from under her by simply backing intermittently as hard as possible with the big stern wheel, the wash of which added to the swift current may gradually work away the gravel, so that the boat slowly drags across. But generally it takes more forceful methods. Of these the two chief ones are "lining" and "sparring," which are sometimes used separately and sometimes in conjunction. To "line" a boat over, you lower a row-boat and load her with flexible wire cable and send her off to some point in the desired direction where a "dead man" can be set and made fast to. A "dead man" is a heavy log of timber buried deep in the ground at right angles to the direction of the cable made fast to it, and has to be used because trees are seldom available and if they were the tree would come to the boat instead of the boat going to the tree when the steam capstan

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begins to pull on the wire cable. If she doesn't move under this stimulus, they put a "strop" on the cable and rig a purchase tackle and take that to the capstan, increasing the power two or four fold. Something has got to go, and very often it is the boat.

"Sparring" is quite a different game, and you play it by getting out the two huge spars or "legs" carried on all the boats. The ends of these you stick in the bottom on each side. These spars are set and held in position by swinging derricks, and there are enormous three-sheave blocks fastened to the tops of them by heavy wire strops, while corresponding blocks are made fast to the sides of the boat. Then the tackle ropes are taken to the steam capstan and by degrees a large part of the weight of the boat and cargo is transferred to the spars or legs. When this has been done the engines are moved ahead and, if the operation is successful, she takes a step forward like a sick grasshopper. ing done so, the lower ends of her spars point backwards and the spars are taken up and reset for another step. Sometimes the spars are set, not for a "jump" with the engines, but to be used to push the boat afloat, in which case, of course, they are set in the direction in

which it is desired they shall exert their pushing power. If the boat is desired to move partly sideways, instead of straight ahead, the two spars can be used on the same side, or sometimes a spar on one side and a "line" on the other may give good results. At any rate it will be seen that a number of powerful stimulants can be applied to induce the boat to think better of it and get to the far side of that bar. If everything fails, the crew keep on working away just the same, till another boat of the fleet comes along and goes to her assistance.

This rather long description of "swift-water" work is necessary in order to enable strangers to understand the incidents which I have selected to illustrate life and service on our River Division.

I may as well begin with some recent ones. During the summer of 1907 the material and machinery for a large dredge had been assembled at White Horse for carriage to the mouth of the Forty Mile River, some 50 miles below Dawson. But some of the important pieces were delayed in reaching White Horse, and the shipment was held back for them till it became very late in the season. If the stuff failed to reach Forty Mile before

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navigation closed, it would mean the loss of a whole year to the owners, as they could only move it up the Forty Mile River over the winter ice. There was about 500 tons in all. making a good load for a steamer and barge, and the "Victorian" was assigned for the job while on her way up river from Dawson. On her arrival at White Horse, however, it was learnt that her pilot was too ill to work and had to be sent to the hospital. There was no other pilot available, as it was so near the close of the season that all our extra men were busy. Unless the boat could be loaded and sail at once, it would be too risky to send her at all, for fear of being caught in the ice. When Captain Whelan heard the difficulty he said, "That's all right - get her loaded and I will take her through single handed." Then he went to sleep while they loaded the "Victorian." This only took a few hours, and he was off on his daring voyage, which involved about forty-eight hours on watch, as the progress would be slow because of the low water and lateness of the season. It will be understood that forty-eight hours on watch in the middle of the Atlantic or some place where there is plenty of room is one thing, and forty-eight hours on watch

down stream in a "swift-water" boat late in the year is quite another. Every minute meant nervous strain and concentrated attention. But the successful completion of the trip justified the Captain's confidence in his powers of endurance.

The wrecks of the "Bonanza King" and of the "La France" and the incidental salvage operations in 1907 furnish good illustrations of the work our river-men are called upon at

times to perform.

The swift current of the river takes out the ice below Lake La Barge several weeks before the lake itself is clear, and during those weeks there is a good deal of traffic which goes over the ice on the lake to boats in waiting on the river below. To accommodate this traffic we always winter one or more steamers and some barges below the lake.

In the spring of 1907 the "Bonanza King" was one of these steamers and had made two trips to Dawson. But the ice being still solid on the lake, on May 28th she was ordered to load a cargo of coal for Dawson at the coal mine at Tantalus, and to tow (i. e., to push) the barge "Big Salmon," also loaded with coal for Dawson. She started from the coal mine about midnight and reached Rink

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Rapids early in the morning of May 29th. Going through the rapids her engines failed to back quickly enough at a critical moment, and she struck the submerged rock in the middle of the rapids and sank at once. Her barge was not injured.

In order to get help to her it was necessary to force a passage from White Horse through the still solid ice on Lake La Barge. As the lake is 30 miles long, and the ice, though rotten, was several feet thick, forcing a passage was no easy matter. The steamer "White Horse" with a salvage outfit and wrecking crew on board was sent to make the attempt, and left White Horse on May 20th, a few hours after the wreck occurred. could only get about half way through the lake, whereupon the salvage crew, under Ship-yard Foreman Askew, left the steamer and took to the ice and succeeded in crossing to the lower end of the lake where the river was open. But they were, of course, compelled to leave the heavy portion of their salvage outfit on the steamer, to follow as soon as possible. They took canoes with them across the ice and in these they completed the voyage of 200 miles to the wreck, where they arrived during the night of May 31st. Askew

reported the "Bonanza King" badly hogged, twisted sideways, "hog chains" broken, and after-end of main deck under water, and that he was afraid she would break amidships if the river rose materially before he could pick her up.

Meanwhile, upon the failure of the "White Horse" to force a passage through the lake, the "Victorian" and barge "Pelly" had been sent from White Horse on May 30th to make another attempt, and they succeeded after having taken on board the salvage outfit from the "White Horse." They reached the wreck on the night of June 1st. The coal cargo was thereupon transferred to the "Victorian" from the "Bonanza King," after which she was slung between the two big barges ("Pelly" and "Big Salmon") and her uninjured compartments pumped out. This being accomplished, the work of raising her was successfully carried out, and the wreck hanging between the two barges was convoyed by the "Victorian" to Yukon Crossing, the nearest place where she could be beached in slack water, with a view to patching up the hole, or at least getting tarpaulins under it. All such attempts failed, however, and it therefore became necessary to attempt

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to move the wreck while still hanging from the barges to our Dawson ship-yards, a distance of some 250 miles of difficult navigation, including the passage of the notorious Hell Gate. The skill of our crew proved equal to the task and the wrecked "Bonanza King," hanging from a barge on each side but under her own steam, reached our Dawson ship-yard safely on June 12th and was hauled out on the "ways." She was repaired and back in service again on July 10th.

On June 29, 1907, the "La France" while returning from a special trip struck a rock in the Pelly River four miles above Fish Hook Bend, and immediately sank. She was nearly 200 miles from the junction of the Pelly River with the Yukon at Fort Selkirk. An attempt was made to salve her with the aid of a small independent steamer secured at Selkirk, but was unsuccessful on account of the rapid fall of the water in the river. When we learnt on July 29th, of the failure of this attempt, we sent a salvage outfit and crew (again under Foreman Askew) up the Pelly in poling boats and canoes. Poling a heavy loaded boat nearly 200 miles against a five-knot current is quite a different game to punting in a Thames back-water, but Askew

and his men reached the "La France" on August 5th. They found it was necessary to haul her completely out of water instead of attempting to float her — but I had better quote our official report:

"After arriving at the wreck Askew pro-"ceeded to get out 'ways,' sink 'dead men' "and haul the boat out instead of attempting "to float her. This was accomplished on "August 12th, after a lot of hard, heavy "work. In the first place they had to grade "down a steep bank in order to get a low "enough beach so that their tackle would "stand the strain. On August 13th and "14th they put bulkheads around the hole "in the boat, which was approximately 51/2 "feet wide and 18 feet long, and on the 15th "they launched the boat and started out for "Selkirk at 7 P. M., made three miles for that "day and tied up for the night. August 16th "they spent mostly in cutting wood. They "had to keep two pumps going continu-"ally and in that way used up a lot of "wood. They found the channel very shal-"low, and in nearly all cases had to get "out lines and haul the boat over shallows. "On August 18th they reached the entrance "to Harvey Canyon at 5 P. M., and found the

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"water so low there that they could not get "through, They unloaded everything, in-"cluding the spare boiler tubes, gear, tackle, "etc., into the poling boat, which they took "through the canyon first, and brought the "steamer through afterwards. They found "the boat was settling underneath the "boiler and they were catching on the "bars right underneath it, so they got out "two extra 'hog-posts' and hauled the "boiler up, which enabled them to clear some "of the shallower bars. Got through Harvey "Canyon on the 19th, with the addition of a "few more holes and soft patches. On Au-"gust 21st they were only six miles below the "canyon and were 'lining' and 'sparring' over "nearly every riffle they met. Askew reports "that in order to get the boat over some of the "places they would have to throw her side-"ways on the stream, and when the water "dammed up sufficiently, they would turn "her around quickly and back her over. "On the night of the 22d it rained quite "steadily and the river rose considerably, "so that on August 23d they made over "fifty miles. On August 24th they reached "Granite Canvon at I P. M., and found the "channel on the left bank dry, so they had

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"to take the right hand channel in amongst "the boulders. Struck a boulder one mile in "canyon and the boat swung head-on to "the bank, stern swung around and struck a "reef, putting several holes in her. They "hauled her bow up stream and made fast "to the bank and put soft patches over the "holes. The boat was then leaking badly "and they were out of wood. Had to climb "a bluff and go scouting for wood. At "2 A. M. they were able to get about a cord "of small willows into the boat. This kept "her afloat until morning. They got her "fixed up and under way again August 26th, "but had to tie up again and go scouting for "wood early in the day. On August 27th "they got under way and reached Selkirk at "11 A. M.; from there we ordered them to "Dawson. They arrived there the next day "and hauled out. Askew in concluding his "report says that he thinks the 'La France' "was nearer 200 miles from Selkirk than "180. The 'La France' is now on the 'ways' "in Dawson."

CHAPTER VIII

OCTOBER, 1903

The river had been very low in 1903 and our boats had been unable to carry full cargoes, while on the other hand shippers had delayed ordering their goods till very late that season. The result was that at the beginning of October, when in ordinary circumstances shipments should be practically over, the warehouses at White Horse were filled with goods destined for Dawson. and there was reason to fear that unless the greater portion of them reached their destination before navigation closed there would be suffering before the winter was over. Accordingly we decided to keep our boats running later than usual and to make every effort to cope with the situation.

On October 13th there was a sudden fall in temperature to below zero and the smaller tributary streams were frozen up, thus causing a rapid fall of the water in the main river. At the same time the larger tributaries began to throw immense quantities of heavy ice into the Yukon. The low water and the

floating ice combined to render navigation almost impossible at a moment when we had twelve steamers working on the river and two on the lakes. But the latter, not having shallow water or heavy drift ice to contend with, were not involved in the difficulties that beset our river fleet. At other times the crew of some particular boat has been called on to meet an emergency, but in October, 1903. every boat on the river was in trouble and every crew called upon simultaneously to show what sort of stuff they were made of The logs of the various boats are most interesting reading. But it would be too monotonous to set them all out and take up too much space, so I will attempt to condense the stories contained in them. The events group themselves into practically three heads, viz., the voyage of the "Mary Graff," the voyage of the "Columbian," and the troubles at Kirkman's Crossing and Steamboat Slough which involved nearly all the fleet.

As regards the "Mary Graff" voyage I do not think I could tell the story as well as Captain Jackman has done it in his official report to the superintendent of our River Division, which I quote verbatim:

"On October 4, 1903, I left White Horse

"at 5:20 A. M. in command of steamer 'Mary 'Graff,' being trip No. 9 north, with 236 'tons freight and 5 tons express mat"ter, drawing 4 ft. forward, 4 ft. 6 in. "amidships, and 3 ft. 10 in. aft, for port of "Dawson. Proceeded to Wood Camp No. 2, "arriving there at 6:45 A. M., took on ten "cords of wood and left at 7:55 A. M. "Passed upper La Barge at 9:15 A. M., "lower La Barge at 12:40 P. M.

"At the lower end of Thirty Mile River, "while engines were backing up, the star-"board tiller broke; we proceeded to Hoota-"linqua and there made necessary repairs "and tied up for the night.

"Left Hootalinqua the next morning, "October 5, 1903, at 5:30. Arriving at Wood "Camp No. 5 at 6 A. M., took on ten cords "of wood and left at 7:30 A. M.; passed "Big Salmon at 10 A. M.

"At 1:20 P. M. we hit the sunk rock lying a "quarter of a mile above the mouth of Little "Salmon River, Pilot Barrington at the wheel, "engines working ahead at half speed, the "steamer being at the time making the cross-"ing from the right to the left bank. I went "below immediately and found boat making "water rapidly, several timbers on starboard

"side broken, therefore ordered steamer beached, as she was sinking very fast. At "1:40 P. M. we beached the boat just below the point of the island above Little Salmon Police Post, about one mile below where she "struck.

"We landed her on a sand-bar beach with "about five feet of water over it, no damage "being done to boat or cargo in beaching. I "had ordered all siphons started immediately "after we struck, and when we beached the "boat there was about 20 inches of water in "hold. We first proceeded to remove cargo. "After this had been done and on further "examining the hull of boat, I found sixty-"one timbers broken and the planking dam-"aged in several places. I put on twelve soft "patches, using blankets, bacon, sacked flour, "etc., then shored all broken timbers back "into place from deck, using ship's fenders, "wheel buckets,* and arms for bracing.

"On October 6th at II:30 A. M. the steamer "Columbian" came alongside. I got a 6inch siphon from her, and she assisted us
off bar and over to wood yard across the
river, detaining her one hour.

"Arriving at Taylor and Drury's Wood

* Paddle floats.

"Camp at 12 noon, we connected up the 6"inch siphon, took on seventeen cords of
"wood, left at 4 P. M. We then proceeded to
"Whitney & Pedlar's Wood Camp, arriving
"there at 5:30 P. M., took on eight cords of
"wood, and tied up for the night.

"The next morning, October 7th, we were "held up by fog untill 11:20, when we pro"ceeded on our way to Tantalus Butte, where "we landed and tied up for the night at "5:30.

"October 8th left at 5:30 A. M., arriving "Devern's Wood Yard at 7:30 A. M., took on "nine cords of wood and left at 9 A. M.

"Arrived at place where scows were tied "up above Five Fingers at 10:30 A. M. We "unloaded 96 tons of hay and oats into scows "and left Five Fingers 6:30 A. M., October 9, "1903.

"Passed Mackays at 8:20 A. M. Stopped "at island above Slack Water Crossing at "10:35 A. M. to repair connecting rod, delayed "25 minutes. Arrived at Minto Crossing at "11:45 A. M., hit on bar, delayed three "hours.

"Arrived at McCabe's Wood Yard at 2:45
"P. M. Took on ten cords and left at 4:40
"P. M. Arrived at upper end of Hell Gate at

"5 P. M., tied up at island, as boats on bar "blocked channel.

"October 10th at noon we got signal from "other boats that channel was clear and pro"ceeded down. When crossing over at lower "end we hit on bar at 12:20 A. M. and stuck "hard. The steamer 'White Horse' standing "by to render assistance to us.

"October 11th: Got off bar at 4 P. M. and "proceeded once more, arriving at Selkirk "at 5 P. M. The steamer 'White Horse' "following behind us stuck fast at the "island above Selkirk. We signalled to her "from Selkirk, and she replied, therefore we "went to her assistance. Returned to Sel-"kirk at 9:30 P. M., took on six and a half "cords of wood and tied up for the night.

"October 12th: Left Selkirk at 5:50 A. M., "arriving at Egleson's Wood Yard at 11:30 "A. M., took on ten cords of wood. While "lying at wood yard steamers 'Dawson' and "Thistle' passed down. Left wood yard "at 12:45 P. M.

"About two miles below Egleson's Wood "Yard hit on bar very lightly, the port side "knuckle-streak hanging on while the boat "swung off. This side of the boat was worn "very thin from frequent hitting on that side

"in Hell Gate. In swinging off this bar she "punched a hole in her side the full width of "the plank in between the timbers. The "boat began sinking so rapidly I ordered her beached. After doing so put on soft patch over hole, siphoned her out, and started "off. Delayed one hour."

"Arrived at Kirkman* at 6:40 A. M., got "down to lower end of Steamboat Slough and "stuck. Steamer 'Columbian' came to our "assistance at 2:30 P. M., got off and through "at 3:15 P. M. Arrived Thistle Creek 4:10 "P. M. Arrived at White River Wood Yard "5:30 P. M. Took on eight cords of wood and "tied up for the night.

"October 14th: Left White River Wood "Yard 6:05 A. M. Below mouth of Excelsior "Creek we hit bar and stuck. 'Selkirk' "came to our assistance at 11:30 A. M. She "pulled us off, but in doing so the stern of "our boat swung with the current and hit "bar, disabling steering gear. Steamer "Selkirk' then took us in tow, arriving in "Dawson at 7:30 P. M. Temperature 8 below "zero."

So ended this remarkable voyage, covering ten days while the usual time is under two.

^{*} We shall hear more of this place later.

Six times the boat was aground, involving practically continuous "sparring" and "lining" to get her over the bad places. Twice she had to be beached to prevent her sinking. Twice her steering gear was disabled, the last time beyond repair; her planking in places had been worn so thin from constant grounding that it was almost dropping off her, and her bottom with sixty-one broken frames or timbers had been so bulged up by dragging across the rock that it had to be forced back into place by shores and braces from the deck beams, but she "got there." Captain Jackman's report illustrates the way our boats help each other when in trouble.

The "Mary Graff" was not one of the boats we built ourselves and was only used as an extra boat in cases of emergency, her draught of water being too great for economical service.

It will be noticed that the "Selkirk" towed the "Mary Graff" from Excelsior Creek to Dawson. This feat of the "Selkirk's" was a truly remarkable piece of swift-water navigation as it involved taking the "Mary Graff" in an unmanageable condition over the Indian River crossing, one of the worst places at that time on the river, as we shall see

from the following account of the "Columbian's" voyage.

This boat left White Horse at 8 P. M. on October 8th, with 234 tons of cargo, mostly perishable, such as fruit, potatoes, etc.; she had a large loaded barge in tow. She proceeded without incident till 1:25 A. M. on 10th, when she grounded in 33 Point Cut-off, remaining aground nine hours. The next trouble was in Hell Gate, where she arrived at 3:45 P. M. on 11th. Captain Turner's report reads:

"There were four boats ahead of us in Hell "Gate and we tied up to allow them to get "through. When the passage was cleared, we "started to go through but got aground at "5:30 P. M. We got off next morning at 8, "thence to Coffee Creek, where we tied up for "the night at 6:30, leaving at 6 A. M. October "13th, at Kirkman's Crossing the "Mary "Graff" was aground, so we tied up at 7:30 "A. M. Took on ten cords of wood and went "to the assistance of the "Mary Graff" get-"ting her off at 3:30 P. M. We tied up for the "night at White River Mill, the 'Graff' and "'Clifford Sifton' being there also. At In-"dian Post, 6 miles below Stewart River, we "grounded in the heavy ice and were fast for "about 30 minutes."

And now she is getting near Indian River Crossing, where her real troubles began. The incidents so far the superintendent in his report simply refers to as "the usual grounding on bars." It will be noticed that the "Columbian" aided the "Mary Graff" twice during the latter's voyage, once when the "Columbian" was on her way up river and met the "Graff" at Little Salmon and pulled her afloat on October 6th, and again when the "Columbian" on her return down river next voyage caught up the "Graff" ashore at Kirkman's Crossing on October 13th, and pulled her afloat again.

I now continue to quote from Captain Turner's report, feeling that these men can tell their own story infinitely better than I could.

"On coming in sight of Indian River Bar "we saw two steamers, the 'Dawson' and "Sifton,' aground and approached under "a slow speed in order to see which side of "them to pass. The ice was running very "heavily at the time, and the draw of the "outer channel drew us onto the head of the "bar at 5:30 P. M., October 14th. On ground-"ing I immediately sent some men ashore "to put in a 'dead man' and run a line.

"At 7:30 P. M. the S. S. 'Dawson' passed up "and refused to assist, saying that the S. S. "'White Horse' would be along shortly.*

"At 5 A. M. on the 15th the second officer "succeeded in getting the 'dead man' in, "after using up half a cord of wood in thaw-"ing out the gravel. The S. S. 'Thistle' "passed up at 10:40 A. M. October 15th, and we "hailed her, but she could give no assistance. "Hailed the S. S. 'White Horse' at 4:20 P. M. "October 15th and she ran a line for us to "the 'dead man.' We then transferred 20 or "30 tons of perishables to the 'White Horse.' "The captain then reported that the ice, "which was running very heavily, had caused

*Capt. Williams, of the "Dawson," explains this by saying that he had of passengers on board and could not feed them if he was delayed very long in reaching White Horse—that he could do nothing for the "Columbian" that night—and that the "White Horse" would be with her before next morning, and thus by continuing his voyage through the night and leaving the "Columbian" for the "White Horse" he was acting on his best judgment. As a matter of fact, he was wrong lecause he got stopped at Kirkman's Crossing and the "White Horse" caught him up there, as we shall see later. However, an error in judgment is no crime and we shall come across Captain Williams again some three years later in command of this same "Columbian" under circumstances that require no apology. It should be explained that boats going up stream can navigate at night with the aid of their big electric search lights, but coming down they have to "tie up" during the dark hours, as the search lights illuminate too small a field. Of course, this does not apply in summer when it is daylight all night.

"the 'White Horse' in to the 'Columbian' a corner of the barge was driven through the side of the former about 8 inches above the water line. The freight was then transferred back to the 'Columbian' and the "White Horse' proceeded up river about two miles and tied up to the bank at 2:30 A. M. "October 16th.

"The S. S. 'Selkirk' came alongside at 7:15 "A. M. October 16th. The ice was too heavy "to remain alongside, so she left again at 8 "A. M. At noon October 17th the pilot, "purser, and one man left in small boat with "provisions for two days to obtain help from "Dawson. At this time the water had fallen "nine inches since we grounded. Made the "barge secure and sheathed it with bucket "planks* to protect it from the ice. Ran "timbers along the upper side of the boat to "form a guard against the ice and closed all "holes on freight-house and deck to protect "the perishables from the frost. We made a "sled and started to haul wood from the "island over the shore ice and along the bar, "a distance of over one and a half miles.

"The S. S. 'White Horse' and 'Selkirk'

^{*} Spare paddle floats.

"left the bank two miles above us at 2 P. M. "October 18th.

"We made several attempts to run a wire "cable to the south shore, but owing to the "heavy ice could not do so. Ice jammed "about 80 feet above the boat on the star-"board side and the water fell 3 inches on "the night of October 18th. Morning of "the 19th the barge was hard aground on the "ice jam. All hands out cutting and hauling "wood. Hailed the police at Indian River "Post to come and take off the passengers "(two policemen came from Yukon Crossing). "Crossed the river twice in the canoe, but "could not handle the wire rope.

"October 22d. Purser, pilot, and one "man returned from Dawson and reported "having wrecked the boat on the way down, "and having completed the trip along the "shore ice.

"October 23d: Pilot and one man re"turned to Dawson.

"October 26th: During this time all hands "were cutting and hauling wood to the vessel, "bringing about one and one-half cords per "day. The water started to rise during the "afternoon. By the morning of the 27th "the water had risen 6 inches. Tried to

"run wire cable to south bank twice during "the forenoon but failed. Managed to get "the wire rope across at 5:10 P. M., ice being "then much lighter, river rising slowly." Cut ice clear from steamer and barge.

"From 5 P. M. October 27th to 1 A. M. Octo"ber 28th the water rose 6 inches, making
"a total rise of 16 inches. Water remained
"at a stand from 1 A. M. to 4:30 A. M., and by
"8 A. M. October 28th had fallen one inch.
"Discharged the perishables onto the ice on
"the port side. The ice broke through and
"part were submerged. Hauled steamer
"off the bar at 10:50 A. M. October 28th.
"Reloaded what perishables could be recov"ered and lay alongside the barge which had
"been stove in by a heavy cake of ice and
"sunk with the deck two inches out of water.
"Lightered barge of 60 tons of freight and
"got the water out of her.

"October 29th: Got the wire cable aboard.
"S. S. 'Zealandian' and 'Crimmins' arrived
"at 10 A. M. to render aid. Left Indian
"River 10:50 A. M., reaching Dawson 3:05
"A. M. morning of the 30th, broke ice to get
"to the dock and discharged steamer in the
"afternoon.

"October 31st: Got barge alongside and

"unloaded. Cleared out ice to let S. S. "Bailey' in and hauled 'Columbian' up "alongside upper dock for winter quarters."

"November 1st: Got scows and barge "alongside and wire ropes out and made "everything secure for winter.

"Our small boat was left at Ainsley by "pilot, purser, and another man that I sent "to Dawson on the 17th of October for help, "and to file protest on general average, as I "was sure we would have to jettison cargo "to save steamer.

"I would respectfully call your attention to "the fact that these three men are entitled to "great praise for making this journey. They "left steamer 'Columbian' in small boat, "ice running very heavy. They got as far as "Ainsley and the small boat got stove in in the "ice. The men got ashore at 6 o'clock at "night. Pilot and man got boat ashore and "stayed at roadhouse over night. Purser "Berdoe pushed through to Dawson alone "that dark night with my letters and papers, "and reached Dawson at 1:40 that morning. "He was the first man to get by the bluffs "over shore ice, and for making this most "dangerous trip in total darkness Mr. Berdoe "deserves great credit. Pilot Bloomquist and

"their courage in making this trip to Dawson for assistance.

"I would like to state that my entire crew, "officers and men, deserve praise for the "assistance they gave me in saving our "steamer while jammed in the heavy ice at "Indian River Bar. This unfortunate trip "has been the means of testing the endur-"ance of my officers and crew, as they did "all they possibly could in the severe cold "without proper clothing or boots, and "worked for nearly 48 hours continuously "in the icy water. They hauled wood over "ice and gravel for nearly two miles to "save the cargo from frost, and risked their "lives every attempt that we made to run "the wire cable to the south side through the "heavy flow of ice.

"I would like to state that Mr. Little, the "second officer, is worthy of advancement "in his turn, as he is trusty, sober, and in-"dustrious."

It seems superfluous to sum up. Here was a voyage lasting 22 days, 15 of which were spent on Indian River Bar, with the heavy floes of ice tearing along at 5 miles an hour and grinding the sides of the steamer and her

barge, and preventing the use of small boats to run lines. A pleasing feature is Captain Turner's desire to give his crew full credit. As a matter of fact, while the crew did excellently, it was chiefly the captain's indomitable energy and resourcefulness that saved the boat. Had he failed to float her, she would have been a total loss when the ice went out next spring.

I fear it will be almost impossible to convey any intelligible idea of the troubles at Kirkman's Crossing and Steam-boat Slough, in which every boat in the fleet was involved. The "mix-up" changed from day to day, some boats getting free and going away while others arrived and got stuck. Sometimes, too, a boat after infinite labour would be got afloat and before she had gone many yards would be ashore again. The heavy run of ice interfered with "sparring," "lining," or lightering.

Kirkman's Crossing is a narrow right-angled turn formed by a sharp sunken elbow on the one side and a submerged patch of shingle on the other. The crossing has, of course, to be "drifted," as the turn is much too sharp to steer round. The stream sets diagonally and makes the operation of drifting the bend

more difficult, and the difficulty is naturally increased when there is a heavy run of ice. Sometimes, as the river gets low, the water "cuts out" a fair channel over the crossing, but other years the water scatters itself all over the crossing, and this was the case in 1903. There is another channel hugging the right bank that some years is pretty fair, and some of our pilots occasionally use it, as the "Canadian" did to her cost in October, 1903. Just below Kirkman's Crossing are a number of islands and between them a maze of submerged gravel bars, forming what is known as Steam-boat Slough. The channels between these bars are constantly changing and it is largely a matter of opinion which is the worst. For all practical purposes Kirkman's Crossing and Steam-boat Slough may be considered as one place.

In places of this sort a good pilot can "read the water," i. e., he can tell where the best water is by the appearance of the eddies and riffles on the surface of the running water. But when the surface is covered with running ice, his book is closed and the pilot can't read it. In October, 1903, the water at this place was so low that even the boats going up stream empty got ashore and had to "line" over, so

it may be imagined what a time the loaded boats going down stream must have had.

For the previous month all the down stream boats had been having what the superintendent called "the usual troubles" and leaving more or less splinters behind them on the gravelly bottom at Kirkman's. But the real crisis began with the stranding of the "Canadian" on October 16th. This boat left White Horse on October 10th with 230 tons of cargo, and by lightering through the bad places with the assistance of lighters stationed for that purpose, was able to reach Kirkman's Wood Yard on the morning of October 15th. Captain Fairbairn reports,"While wooding up, "the pilot and myself sounded the two chan-"nels and found the centre channel had only "three feet while the steamer was drawing 40 "inches. We therefore decided to go down "the shore channel which we had been using "all season, although in order to get into "it, we would have to 'line' and 'spar' the "steamer over the entrance. We succeeded "in this at 8 P. M. and tied up on account "of darkness, starting again at 7:40 A. M., "October 16th.

"The ice had begun running heavily dur-"ing the night and was very thick when we

"started, which prevented me seeing* that "the narrow channel through which we must "pass had been spoiled by the 'Sifton' and "'Graff' while aground there just previous to "our arrival, and we stuck hard about the "middle of the channel."

The cargo being all perishable, and the thermometer below zero, Captain Fairbairn was reluctant to make any attempt to land or lighter it until he had seen whether any of our other boats could take it on to Dawson. The "La France" (a small boat) was able to take 15 tons, but the "Dawson" (on her way down stream) + had all she could manage of her own cargo, and the "Thistle" was in the same case, so Captain Fairbairn, having failed in all attempts to free his boat, at length reluctantly decided to land his cargo. The "Canadian" was 150 feet from the shore and through this space the water was running like a mill stream, swirling along great floes of ice, so the only way to land cargo was to rig an overhead cable between the boat and the shore and haul the cargo along it. It was not a tempting job for the men sent away in the small boat to attempt to run the wire cable

^{*} By "reading the water."

[†] We shall meet her again coming up.

ashore, but there was no lack of volunteers, and the cable was successfully run and rigged and the cargo landed. But all this time the water had been falling rapidly and the "Canadian" was no nearer floating after her cargo had been landed.

To make things worse the "anchor ice" froze her to the bottom. After this happened the only way to float her would have been to thaw her loose by filling her hold with live steam until her bottom planks had been warmed through and thawed out the grip of the "anchor ice." As a matter of fact if it had been possible to get enough cordwood on board to keep steam up in the boilers they could have thawed her loose and she would have floated with the same rise of water which floated her sisters the "Victorian" and "Columbian." The difference was that Captain Turner and his crew had been able by superhuman efforts to get wood, as we have seen, while Captain Fairbairn was not allowed to try, as the superintendant, who had arrived on the spot when troubles began to thicken, wanted the "Canadian's" crew for work on other boats, where their efforts seemed likely to accomplish better results than hauling sticks of cordwood aboard the "Canadian"

by wire cable. Furthermore, the unfortunate selection of the shore channel had put the "Canadian" in a "pocket" that she could not get out of that season in any case, and all that could be done with her even if she had been floated, would be to get her in a position somewhat more protected from the ice when the river broke up in the spring.

While the "Canadian" was in the early days of her troubles the "Bailey" reached Kirkman's Crossing. She was a small boat and had left White Horse on October 11th with 130 tons of cargo and a couple of barges. Captain Bragg reports: "From the time "we passed Selkirk ice was running heavily "and I tied up two miles above Kirkman's "Crossing to give the river time to clear, as "I knew that it was ice from the Pelly River "and would only run a few days, and was "afraid of trying the Crossing while the ice "was running so thick. On October 18th "while trying to make the Crossing she could "not hold herself against the running ice and "grounded on the upper edge of the lower bar "with 3 feet of water on the starboard side and "10 inches on the port side. I had not enough "cable to reach across the river and when I "tried to 'spar' off was unable to budge her

"owing to the ice running too heavy to handle "spars."

Her two barges, of course, went ashore with her. So there was the "Bailey," plastered up against a steep bar by the force of the current and the ice. But the steepness of the bar would make her come off easily, if anybody would be kind enough to take a good pull on her.

Meanwhile the "Dawson," bound up river, after turning a deaf ear to the "Columbian's" plea for assistance, had herself got into trouble on her arrival at Kirkman's Crossing, where the heavy ice had forced her ashore. Her sister ships the "White Horse" and "Selkirk," with over 100 passengers each, had caught her up, and were devising means to pull her off from the bar and get her out of their own way, and considering how they could avoid letting the ice put them just where it had put the "Dawson" when it came to their turn to have a try.

Captain Sanborn of the "White Horse," Captain Williams of the "Dawson," and Captain McMasters of the "Selkirk" were unanimous that the "Bailey" must be regarded as a divine interposition in their favour, which it would be sacrilegious to

neglect. But in getting the "Dawson" afloat she swung on top of the poor little "Bailey" and broke both the latter's cylinder timbers. Then the three big boats proceeded one by one to haul themselves over the Crossing, using the "Bailey" as a sort of mooring post to hold them against the ice. Captain Bragg pointed out that the effect of this would necessarily be that the "Bailey" would be pulled out almost high and dry on an intervening knuckle of the bar, leaving him in much worse case. The big boats admitted this with much the same good-natured indifference exhibited by big boys at school when a small boy points out that it will dirty his handkerchief if they clean their boots with it.

Secure in the understanding that even if they dragged the "Bailey" out of water, they had plenty of power to drag her back again, Captain Bragg spent one entire day helping the "big boys" to metaphorically wipe their feet on him, using his own wire ropes and steam capstan to reinforce theirs. Then, it being dark by the time all the "big boys" had got safely over, they went away to take on wood during the night, and Captain Bragg lay down with a good conscience after a hard

day's work helping others, and thought how nice it would be when they returned refreshed in the morning, and pulled him afloat again.

But people who depend on mere gratitude are generally doomed to disappointment, and Captain Bragg's remarks when he saw the three "big boys," with the first gleam of morning light, back out from the wood vard one after the other and blow the "White Pass Good-bye" on their hoarse steam whistles and start gaily up stream, were, I understand, warm enough to melt some of the ice by which he was surrounded. Poor man. isolated on his gravel bar he could not know that the conduct of the perfidious "big boys" was not so black as it appeared to him. The fact was that the superintendent, who had arrived during the night, had ordered the "big boys" off up river as hard as they could pelt with their 300 passengers, while he proposed to use the "Zealandian" to get the "Bailey" afloat.

As soon as it was realized that things at Kirkman's Crossing were so serious, the "Zealandian" (one of the smaller boats), on her way up from Dawson with 42 passengers, had been ordered to transfer them to the "Thistle" and "Dawson" (which were fairly

full already), and stand by the "Canadian" and "Bailey." At first she had devoted her time to the big boat, but on the arrival of the superintendent, he had, for the reasons already given, decided that the "Canadian" was not a promising subject to spend time upon while he had so many other troubles on his hands. He had prior to leaving White Horse telegraphed orders to the "Victorian" on her way down with passengers, mails, and a moderate cargo, to land, or "cache" as it is called, all her cargo that was not perishable and hurry to Kirkman's Crossing. These orders were received and executed at Selwyn. The idea was that the big "Victorian" would be heavy and powerful enough to do more than a dozen "Zealandians," and would still have time to reach Dawson with her passengers and perishables.

She was due the same morning that the "big boys" had been ordered to pelt up stream, and the superintendent felt confident that she would pull Captain Bragg afloat quick enough to make his head swim. When the "Victorian" reached Kirkman's Crossing with only a light cargo of perishables, the first thing she did was to try to

get the "Bailey" afloat. But after a day and a half every rope in both boats had been used up, and the "Bailey" was where the "big boys" had left her. So the "Victorian" took a few pulls on the "Canadian" for luck but with the same result. When the last rope was expended, the "Victorian" started for Dawson with her mails, passengers, and perishable cargo. But she found it impossible to get through and stuck hard in the middle channel.

That made three boats and two barges in trouble and only the little "Zealandian" affoat. She was on the Dawson side of the bad water. Accordingly, the "Victorian's" mails and passengers were transferred to her and she was sent off to the lower wood yard with orders to "wood up" and await the barge, to which the "Victorian's" perishable cargo was to be transferred during the night. However, owing to a misunderstanding the "Zealandian" started without the barge. She got safely to Dawson on October 27th and was ordered to hurry to the aid of the "Columbian" on Indian River Crossing. She got there just twenty-four hours after Captain Turner's unaided efforts had freed his boat.

The barge which the "Zealandian" failed to wait for was given a crew of six men under command of Chief Officer Griffiths of the "Canadian," and under "sweeps" made the voyage to Dawson in safety, a remarkable performance, and one which ranks with the best work of that trying time.

After the "Zealandian" and the barge had left on October 25th, the situation at Kirkman's Crossing was represented by three boats and two barges badly ashore and no chance of any other boats turning up to help them. The "Canadian" had already been given up as not worth wasting time with.

Captain Bragg was cut off from all assistance from the shore and any moment the heavy ice might crush the little "Bailey" and sweep her away like a broken egg-shell, and that would be the last of her and her crew. But Captain Bragg had no wish that the consciences of the "big boys" should have any such load imposed upon them. All ordinary means of getting a boat afloat having been tried unsuccessfully, it only remained to invent some special means. With this in view the captain took a look over his cargo and found some contractors' "scrapers."

These are enormous flat-bottomed wide iron scoops to be pulled by two or more horses and used for the removal of loose soil. gravel, etc., short distances, thus avoiding the delay and expense of loading the stuff into carts. It seemed as if something might be done with these.

So the captain got a few on deck and rigged some of his broken wire ropes to them. Then he took the contrivance aft, and taking one end of the rope to his steam capstan he dumped the scrapers overboard and started up his capstan. It worked all right, but of course for a long time there was nothing to show whether he was really doing much good under the bottom of his boat, as it was of no advantage to scrape out a couple of ditches on each side. However, he stuck to the work and on the morning of the 26th he had dredged himself afloat. He proceeded across to the wood vard at Kirkman's Crossing to unload his cargo and "wood up," preparatory to going over to unload and free the two barges which he had been convoying, and which were still ashore.

But misfortune seemed to dog the "Bailey" - while she was waiting for daylight on the morning of the 26th, a heavy run

of ice caught her at the wood yard, tore her loose from her moorings, and stove her in. She then drifted down about a mile and was beached to prevent her sinking, the starboard side of her cargo deck being a few inches under water. Five minutes later the sudden rise of water that had set the ice in motion floated the two barges and off they went down the river on their own account, passing near the "Victorian" whose crew were able to beach them in a favorable position. Soon afterwards the same rise of water, supplemented by some mighty efforts of the crew, floated the "Victorian" herself. Things were looking up. Instead of three steamers and two barges badly ashore, two of the steamers had been floated and one sunk again, and the two barges, though still ashore, had shifted into a better position.

The first thing was to try to float the "Bailey" again, and with this object the "Victorian" was sent to her assistance. She transferred the "Bailey's" cargo, and then the holes in her were stuffed up with blankets and mattresses and a 6-inch, and a 4-inch, and a 3-inch siphon started to pump her out. These took so much steam that by night they were short of wood, and had to stop, having only

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reduced the water a foot, which was immediately lost when the siphons had to be stopped. While the "Victorian" was getting a fresh supply of wood the crew of the "Bailev" managed to work a tarpaulin entirely under her, and when the "Victorian" at daylight on October 28th started the pumps again the water was kept under control and at 3 P. M. the "Bailey" was once more affoat. Leaving her crew to patch her staved-in planking as best they could, the "Victorian" bustled off after the "Bailey's" two barges and brought them to her. Then the cargo in these two barges not being perishable was landed and "cached," and the barges loaded with what perishables remained unspoilt from the cargoes of the "Canadian," "Victorian," and "Bailey." On the morning of October 29th Captain Bragg in the "Bailey" started with the two barges and squeezing past the "Canadian" with great difficulty brought them safe to Dawson on October 30th, and made fast alongside the "Columbian," which had just previously reached Dawson.

After the departure of the "Bailey" and her barges, the crews of the "Canadian" and "Victorian" busied themselves protecting the non-perishable cargo left on shore and

preparing the "Canadian" as best they could to withstand the winter ice. Extra planking and her spare paddle floats were spiked around her bows, and her big spars were lashed alongside so as to take the weight of the ice, and she was left with a watchman for the winter. The "Victorian" took the "Canadian's" crew on board and after a hard struggle got over Kirkman's Crossing and started for White Horse where she arrived, after a hard trip on November 6th.

The little "La France," manned by the "Mary Graff's" crew, fought her way up from Dawson behind her, leaving on October 29th and arriving at White Horse on November 8th. She had her paddle floats in shreds and her planking not much better from the ice. Every few hours they had to stop to chop the ice out of her stern wheel, but she had a fine passenger list at very satisfactory rates and cleared up enough that trip to replank her and leave a handsome profit as well.

Next spring, before the ice began to move, we sent men to Kirkman's Crossing to protect the "Canadian." It will be remembered that there was a shallow bar at the entrance to the channel she was aground in, and that

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she had to climb across this bar to get there at all. We decided the surest way to protect her was to build a bulkhead across the shallow entrance and thus throw all the ice down the middle channel when it began to move. This was done, and when the ice went out the "Canadian" came paddling up to White Horse none the worse for her winter at Kirkman's Crossing.

CHAPTER IX

THE BURNING OF THE "COLUMBIAN"

On the evening of September 25, 1906, the White Pass steamer "Columbian" was proceeding down stream on her last voyage to Dawson for the season. She had a crew of 25 men and a full cargo, including a number of cattle, and three tons of blasting powder in heavy corrugated-iron kegs. Because of the powder, no passengers were carried on this trip, but there was a stowaway named Wynstanley who had come on board with the cattle and was at first supposed to be in charge of them. After the mistake was discovered the next place where he could be put ashore was the Tantalus coal mines, and there the necessity for landing him would cease, as the powder was to be transferred at that point to a coal barge and Wynstanley, who was in a great hurry to get to Dawson, could become a passenger.

The watch which had been relieved at six was at supper, while the watch which had just relieved them, having finished supper, was enjoying the perfect evening. The

"Columbian" was jogging along quietly, doing about 12 1/2 miles an hour. The captain had just gone on watch and was alone in the lofty pilot-house, at the wheel.* On the front of the passenger deck below, the purser and Wynstanley stood watching the wild geese and ducks in the river, and on the "bow" (as the open part of the cargo deck is called). below them again, some of the watch also had an eye on the geese and ducks. On the forward end of the low open bow, the powder kegs were piled in two stacks, one on each side of the steam capstan, each carefully covered with double tarpaulin. In the very bow in front of these stacks the chief officer was standing for a moment after supper prior to turning in. The fireman on watch was Morgan and his trimmer was Smith, and these two with a deck hand named Woods and little Phil Murray, the deck boy, made up the group watching the ducks and geese from the after end of the open bow. Between them and the stacks of powder, the two big gangplanks lay stretched across the bow on top of one another. There were thus five of the

^{*}Our captains, who are also pilots, take one watch and the pilot the other, and both captain and pilot steer themselves rather than attempt to transmit their wishes to another helmsman.

crew on the bow, with the purser and Wynstanley just above on the front of the passenger deck, and the captain high above them all in the pilot-house.

Little Phil Murray, the son of Frank Murray, pilot of the "Bonanza King," was a general favourite. He was a keen sportsman and had a small repeating rifle for shooting at anything from a moose to a ground squirrel whenever he could get a run ashore. The excitement of the geese was too much for him and though it was against orders he got his rifle and slipped a cartridge in. The captain couldn't see him from the pilot-house and he didn't see the mate behind the stacks of powder.

Just as he was going to fire Morgan said, "Let me have a shot, Phil—I never fired a rifle in my life." Phil handed him the rifle saying, "Hurry up, they'll be off." Morgan, naturally excited, snatched the rifle and sprang forward to get a clear view. In doing this he caught his foot against the gangplanks lying across the deck and stumbled forward, bringing the muzzle of the little rifle against the tarpaulins covering the powder. In stumbling he pulled the trigger—

It is impossible to convey a clear idea of

what happened next, because everything happened simultaneously, while it is necessary to describe events separately. There was a "dull roar," and a blinding flash of flame enveloped the "Columbian" from stem to stern, but the explosion being unconfined did no more actual damage than burst up the front of the light passenger deck on which the purser and Wynstanley had been standing, and burst in the front of the pilot-house. It was the sheet of flame that was destructive. The evidence of the survivors is clear that of the crew aft none either heard or felt the explosion. What attracted their attention was the sheet of flame that swept the ship. The men amidships, including the officers and crew that had just come off watch and were at supper, heard "a dull roar," "a great poof," "a dull thud," "a muffled boom," as it is variously described, and with it came the blinding sheet of flame. The men forward who were protected from the sheet of flame, including the captain in the pilot-house and the chief steward in the smoking-room, describe the dull roar and the sheet of flame, but they also experienced the upheaving effect of the explosion to a moderate extent. Of the seven men forward who were exposed

to the sheet of flame only one, Wynstanley, recovered to say anything and he had little or nothing to say. Of the remainder the chief officer, Welch, was blown overboard, burnt to a cinder, and without a stitch of clothes left on him. His body was not recovered till two months later some 20 miles downstream. The last that anyone ever saw of Morgan was as he stumbled against the powder kegs. His body has never been found, nor any trace upon which to base a theory of what became of him. The fate of the others will be described as the story develops.

Let us now join Captain Williams in the pilot-house and see what happened there. The rush of air from the explosion blew in the glass front of the house, and jammed the door. It also threw the captain from the wheel and down onto the floor while the flame burnt him slightly (he was probably too high up for the worst of it). Recovering his feet in a moment, he seized the lever of his steam stearing gear and found it would not work. Then he tried the wheel of the hand steering gear, but neither would that work. His engine-room signals would not work either, and the same applied to his speaking tube to the engine-room. The only other thing

he could do in the pilot-house would be to blow the fire alarm whistle, and this seemed unnecessary in view of the fact that the ship was a mass of flame from stem to stern and that every soul on board knew it.

The pilot-house itself was on fire everywhere, when the captain, finding he could do nothing there, tried to open the door leading onto the "Texas" deck. He found it jammed, and kicked it open. On the "Texas" he met the pilot, who had been at supper and had climbed up on the "Texas" by a stanchion to go to his fire station, which was in the pilot-house. The crew whose fire stations were on the "Texas" had been equally prompt, and were all standing to their stations and had already got the hose and fire buckets at work playing on the fire, but as it was a case of fire everywhere they knew their efforts were hopeless. Other members of the crew, whose duty it was, were getting the boat covers off and the boats swung out, and others were standing with the davit falls in their hands. Meanwhile the blazing ship with her helm amidships was going full speed down the river and unless she could be brought to the land not a soul would be alive in five minutes. Already the boats were on

fire and the davit falls burning in the men's hands.

Leaving Pilot Baughman in charge on the "Texas" the captain ran aft and slid down a rope onto the narrow guard rail that ran all around the ship, and worked his way along it till he came to the engine-room gangway, through which he could see Mr. Mavis, the chief engineer, standing in the middle of smoke and fire with his hand on the starting gear. He shouted to him above the roar of the fire to stop her, which was done. Then with consummate coolness the captain calmly waited a few moments till a turn in the crooked river gave him his opportunity and then he ordered half speed ahead and rammed the bank with his bow. He knew that the swift current would spin the ship round like a top, and that she would rebound from the bank back again into the channel, but he wanted to give the men on the bow a chance to jump ashore if still alive, and also to get her stern pointing towards the shore when she spun round. As soon as she struck the beach with her bow he stopped the engines, and when she spun round with her stern to the bank, he ordered the engines "full speed astern," and with his big stern wheel

he backed her up on the gravel beach and held her there, "scratching gravel" with his wheel going astern, while he got two of his crew overboard up to their waists in the swift current with wire hawsers which they quickly made fast to trees on the bank while others of the crew "took a turn" of the hawsers round the bitts on the guard rail. Then the captain said, "That will do with the engines, Mr. Mavis," and the "Columbian's" great stern wheel ceased to revolve. She had made her last landing. The captain then turned his attention to getting the injured men ashore and saving his crew.

Now let us see what Mr. Mavis, the chief engineer, did. When he saw the sheet of flame sweep through the lower deck from the bow, he neither heard nor felt the explosion, but he knew that the powder had somehow "let go." He started the fire pump and gave a pressure of 60 lbs. for the fire hose, and suspecting his fireman Morgan might have sufferred from the explosion he looked at his engine-room steam gauge and saw he had 205 lbs. pressure to the square inch on his boilers. Any moment he expected orders to stop his engine, which would increase the pressure on his boilers, and the fire with which they were

now surrounded would have the same effect. It would never do to let them explode, so he started the boiler pumps full force in order to knock the steam down. Still no orders came from the pilot-house. The captain might be dead for all he knew, but he didn't like to stop the engines without orders. He looked out of the engine-room gangway and saw Smith, the coal trimmer, all in flames groping his way blindly aft along the guard rail. Leaving the engines for a moment, he snatched him in through the gangway into the engine-room, where he collapsed on the deck and Mavis called help to extinguish his clothes while he himself returned to his engines. By this time the whole lower deck was an inferno of flame and smoke, and through this he heard Captain Williams give his order to "stop her" before he saw him. When the captain released him from his engines, being still apprehensive that the boilers would explode, he fought his way through the flames to his safety valve and eased it, so as to let the steam blow off. He could not reach the stokehole to look for Morgan, so he aided in getting Smith ashore and himself jumped overboard, standing up to his waist in the swift river, to help to carry Smith up the bank.

Now let us see what the men at supper did. The officers at dinner in the saloon were Pilot Baughman, Second Officer Clifford Smith (who must not be confused with Smith the coal trimmer), and Second Engineer Borrowman. and Waiter Barber was on duty attending at their table. The watch below were finishing, or had just finished their supper in the mess-room, where Messman Wilson was attending to them. Second Cook Johns was on duty in the galley and Pantryman Lewis in the pantry. These men all describe hearing or feeling the dull explosion, and before any of them had made up their minds what it was (most of them had forgotten about the powder), the sheet of flame swept the ship. We have already come across Pilot Baughman at his post on the "Texas" when the captain left the pilot-house. The second officer's fire station was also on the "Texas" and it was his duty to turn on the valves admitting water to the hose after he had seen the hose properly laid. This he did and directed the efforts of the men working the hose and fire buckets, while the pilot attended to getting the boats cleared for lowering. In one of these gangs was the waiter who had been waiting on the officers' dinner table in the saloon a moment

before, and in the other gang was the messman who had been giving the watch below their supper. Both these men were at their stations as soon as their officers, and how soon this was is demonstrated by the fact that several of these officers and men say in their evidence that the first thing they noticed as they got on deck and ran for their stations was the dropping on the smooth surface of the river, all round the boat, of the shattered powder kegs. It doesn't take long for a powder keg that has gone up in an explosion to come down again, but it took long enough to give the "Columbian's" watch below time to reach the deck in their rush to their stations. Having got to their stations, they went as coolly about their work as if on a parade fire drill and stood to their stations till ordered to "abandon ship." The canvas hose burnt and burst, the boats hanging in the davits caught fire, and so did the boat falls in the men's hands, the "Texas" deck and the passenger deck were burning and giving way beneath their feet, every moment they expected the boilers to explode below them, and most demoralising of all, every man of them knew that his efforts were hopeless and useless, that no hose or buckets could affect

the conflagration in the slightest, and that no boat could be lowered and that their only hope of escape from appalling and immediate death depended upon whether the captain could succeed in getting the blazing and unmanageable "Columbian" to the river bank, and hold her there long enough to save their lives. They had seen him leave the pilot-house, so they knew that the steering gear and engine-room signals could not be worked — they had seen the man upon whose success or failure all their lives depended slide down a rope into the fire and smoke below, and still they stood to their stations and waited for orders.

Now let us see how it fared with the men exposed to the sheet of flame on the bow and the front of the passenger deck. Of Welch and Morgan we know already all that ever can be told; and we have met poor blinded Smith groping his way along the narrow guard rail with his clothes in flames ("I pulled the fire off him" is the graphic language of a witness at the inquest, not "I pulled the clothes off him";—he was clothed in flame), and finally dragged into the engine-room by the chief engineer. There remains of the five men on the bow only Woods

and little Phil. They, like Welch, had every stitch of clothing (except their boots) blown off their bodies, which were burnt and charred and singed and blackened so as to hardly appear human, but they were not only alive but conscious and able to jump ashore when the captain rammed the bow into the bank and gave them the chance to jump. The purser and Wynstanley had been precipitated onto the cargo deck when the front end of the passenger deck on which they were standing had been burst up by the rush of air from the explosion. Their clothes were not blown off their bodies and they were not so badly burnt as Smith, Woods, and little Phil, but they were very seriously injured for all that. However, they too were able to jump ashore when the captain gave them their chance.

Now let us muster the crew on the bank. After the bows swung out from the bank and Wynstanley, the purser, Woods, and little Phil had jumped ashore, the only injured man remaining on board was Smith on the engine-room floor. He was landed in a sort of hammock made of blankets held high in the bearers' hands, and the pilot and chief engineer themselves, with the two deck

hands who had first jumped overboard with the wire hawsers, made up the party of bearers standing waist deep in the swift stream to receive Smith from the captain's own hands, lowering him down carefully from the engine-room gangway.

As the little party bearing Smith proceeded up the gravel beach they were met by the purser and Wynstanley and two blackened, hairless, naked creatures. "Is that you, Phil?" said one of the bearers, unable to believe his eyes. "Yes, it's me," said little Phil, and promptly collapsed on the beach. In a moment the rest of the crew joined the party on the beach, Captain Williams being the last man to leave the ship.

As soon as he was ashore and found the chief officer missing, he started to try to climb back on board again, thinking Welch was asleep in his room on the "Texas" deck, which was even then collapsing. They had to hold the captain back by force while the second officer explained that he had visited Welch's room to call him the moment he had reached the "Texas" deck, but had found the room empty. Before this had been made clear, and before it was safe to loose hold of the captain, the "Texas" collapsed and carried with it the

passenger deck. There was another sheet of flame for a moment, followed by a shower of sparks, and the "Columbian" had ceased to exist, though the lower part of the hull and the cargo continued to smolder till the "Victorian" came and put it out with her fire pumps twenty-four hours later.

It is satisfactory to think that probably the unfortunate cattle never suffered at all, as they were almost certainly smothered by the thick smoke which filled their portion of the ship until the deck fell in. This view is confirmed by the fact that there was neither the bellowing nor struggling which invariably characterize cattle in a fire.

It is now possible to attempt to gather the scattered thread of the story together and see what had happened. At 6:20 P. M. the "Columbian" was peacefully paddling her way down river, the crew at supper or just gone on watch after supper, no thought of danger in any mind. Morgan stumbles over the gangplanks and in the twinkling of an eye, death or serious injury comes to seven of the people on board, and sudden fierce destruction wraps the doomed boat in its awful folds. These are the sort of moments that test men. No time for consultation

or thought or concerted action. No man knew who survived or who might be dead. In such circumstances any crew that could show a fair percentage of men who did their duty might well be satisfied. The "Columbian's "crew showed 100 per cent. doing their duty — not one missing from his place a few seconds after the call — and not merely doing their duty, but doing it intelligently and efficiently. What must one think of the captain's brilliant work under awful responsibilities? But before one has quite settled this the vision of the chief engineer arises, standing to his engines in the midst of smoke and fire, waiting — just waiting — for orders! Then one thinks these men did well — more than well — but they were the officers. What of the rank and file? The "Birkenhead" is usually taken as the climax of steadfast courage in such cases. Where was there a waiter or a cook or any man of the "Columbian's" crew that fell short of the "Birkenhead" standard in perhaps more trying circumstances. Think of the men standing steady with the hose and ropes burning useless in their hands, and the decks giving way beneath their feet while every moment they expected to hear the roar

of the exploding boilers drown for the moment even the roar of the flames. These men had no warning — no time to think and pull themselves together — no orders were given, because none were needed. Why are not these men the equals of the men on the "Birkenhead"?

In less than five minutes from the explosion the "Columbian" had been safely made fast to the bank. Till that moment all these men were face to face with instant, appalling death in its most terrifying form. They all could appreciate what a slender chance there was for the captain to bring the unmanageable conflagration to the bank, and hold it there in spite of the swift current sweeping it along. They all knew that on this slender chance their lives absolutely depended, but no man left his station to watch what the captain was doing. How shall we place these rank and file in comparing their conduct with that of the captain and chief engineer? For myself, I prefer not to compare them, but content myself with the hope that if ever it comes to my turn I may not fall short of the standard set by the humblest member of the "Columbian's" crew. We may, however, feel proud to think that all



"COLUMBIAN" BEFORE THE FIRE



"Columbias" After the Fire



this was done under the White Pass flag, and that these men were (and mostly still are) on the White Pass pay-roll.

It still remains to describe the steps that were taken by the "Columbian's" crew to get aid for their injured, and to extricate themselves from their forlorn situation without food or clothes or shelter on the river bank. The catastrophe occurred 9 miles below the mouth of the Little Salmon River and about 30 miles above the Tantalus Coal Mines. At the latter place there was a telegraph office and at both places there were houses where food and blankets and help might be looked for, and possibly at Tantalus some rough surgical dressings.

Captain Williams, knowing the approximate position of every one of our fleet of steamers on the river, knew that the first boats likely to reach him were the "Victorian" or the "Bonanza King," each working her way slowly up stream pushing a big barge before her (the Yukon equivalent for towing). Whichever of these first got the news would tie her barge to the bank and come racing to the rescue. The "Dawson" had passed some hours before on her way up stream, but there was just a chance to catch her with

a wire before she passed Hootalinqua, in which case she would turn short round and come tearing down in a few hours.

Everything depended on how soon the telegrams could be put on the wires at Tantalus and whether the telegraph clerks at the other places were awake, as there are no night men. The captain, as soon as he had made the injured as comfortable as possible, decided to send two men to Little Salmon for help, and picked out Second Officer Clifford Smith with two men to make the race against time to Tantalus, 30 miles away. The Little Salmon expedition arrived there duly and returned with a few supplies and a boat next morning, without any special mishap or adventure.

But the Tantalus trip is worth describing. It started at eight in the evening, and for a couple of miles followed the river bank, but their progress was slow on account of the underbrush and timber. After a couple of miles Smith realized that he must do better if he wanted to do any good at all. Selecting some driftwood on the beach, he made his men give him their belts and braces, and using these with his own he managed to strap together a few small logs. Taking a pole to

guide his course, he committed himself to the rapid stream and sent his men back to camp with orders to tell the captain he would get there if he could keep out of the numerous blind channels. This he foresaw would be difficult, because his raft could barely support his weight and was unmanageable in the swift current and likely to upset if he attempted any control over its movements. However, he kept her going somehow till near Tantalus he heard someone calling him from behind, and was soon overtaken by Captain Williams and Chief Engineer Mavis in a canoe which they had got from the men of a wood yard who had been attracted from some miles' distance to the wreck by the conflagration. The captain fearing Smith's raft might never reach Tantalus had borrowed the canoe, and leaving Pilot Baughman in charge at the camp, he and Mavis had started for Tantalus. When they caught up Clifford Smith on his little raft, which had almost broken up, they took him on board and soon afterwards arrived at the coal mines. at five minutes past midnight.

It proved impossible to call the telegraph clerks at any of the other offices so late at night, and consequently the "Dawson" had

reached White Horse before she could be made available, and the "Victorian" was 15 miles down stream from Tantalus before she got the news. She immediately dropped her barge and raced for the wreck, arriving at 7 P. M. on the 26th. The "Dawson" was turned short round at White Horse and converted into a kind of floating hospital, and with doctors, nurses, and all necessaries left White Horse at 1:30 P. M. on the 26th for the wreck. The "Bonanza King" did not reach Tantalus till 4 P. M. on the 26th.

While the captain was attending to the telegraphing, the chief engineer and second officer had roused the coal mine people and were busily collecting a supply of blankets, lint, oil, vaseline, provisions, and medicines and making them into three separate bundles or "packs." These weighed about 50 lbs. each and Clifford Smith's nearly 60 lbs.

The journey back must be made on foot through the timber and underbrush along the river bank, as there was no trail. It would be slow work at the best, but if a horse could be obtained to carry the "packs" a great deal of time could be saved. There were no horses at Tantalus except some Mounted Police ones in charge of a constable who was

awakened on the assumption that he would give the use of a horse as a matter of course. It would have been better to have let him sleep and taken the horse and settled the matter afterwards with his superiors. He proved the "regulation pattern stamped-out-of-asolid-block" kind of constable and said he had "no orders" and point blank refused a horse till he had got orders, which could not arrive by wire much before the time the expedition hoped to get back to the camp. Having heard a plain expression of what our boys thought of him, the constable resumed his slumbers. Discouraged but grimly determined "to get there or break a leg" our men set out on their return journey after a hastily snatched meal

In order to appreciate the task before them let anyone pick out in his mind's eye any stretch of 30 miles with which he is familiar, and then imagine nearly every yard of it obstructed by fallen trees and scattered boulders, with frequent intersections by small rivers, streams, and torrents. Having got this picture clearly in his mind, let him propose to himself to carry a good-sized portmanteau full of clothes and things over this 30 miles in a race against time. Very few

people would care to carry the portmanteau a quarter of a mile along a smooth street to a railway station, but what about hurdle racing for 30 miles with one?

Our men were sailors, not pedestrians or porters, but they simply had to get these packs somehow to that camp and the only way was to carry them. So they set out at two in the morning. Two of the friendly miners themselves used to facing death and helping the injured—insisted on accompanying the expedition a part of the way and helping to carry the packs, but the sailors soon walked them off their feet. At the end of 5 miles "Webber's leg played out and the other "man played out, too. They did all they "could and wanted to do more," was the evidence at the inquest by one of our men. I may as well quote the rest of his evidence regarding that trip.

"Q. 'You must have been played out "yourselves by the time you got back to "the wreck."

"A. 'We were played out two or three "times over and when we got to a creek we "would sit down and take a teaspoonful of "brandy and eat an egg instead of drink-"ing water. Just enough to keep us going.

We had to keep going anyhow, and we had "been walking so long that if we sat down long "to rest we would get stiff and not be able to "go along at all. So we did not want to sit "down at all." That seemed to them a simple way of solving the difficulty.

In the end they carried their packs into camp about noon on the 26th, having averaged three miles an hour with them for ten consecutive hours.

Meanwhile, soon after the Tantalus expedition had left the camp the previous evening, the coal trimmer Smith had died of his injuries at about ten at night, and at about two in the morning Woods had also diedin both cases a merciful release. Little Phil was quite as badly injured, but had made no complaint or groan. The crew, to encourage him, told him the "Bonanza King" was coming, and Phil made up his mind to see his father again before dying. So he hung on all the dreary day and never uttered a groan or complaint even when they dressed his wounds (he was all wounds). Shortly before 7 in the evening they heard the paddles of a steamer and Phil brightened up, expecting his father. But it turned out to be the "Victorian" and little Phil was carried tenderly on board at

7 P. M. I quote from Second Engineer Borrowman's evidence "I helped carry the purser "on board [the 'Victorian'], and Jack Porter "[one of the 'Columbian' crew], came to me "and said 'If you want to see the last of Phil "you've got to come right now," and I went "up alongside of Phil and he was barely "breathing and did not know me. It was "five minutes past seven * * * Phil Mur-"ray died at five minutes past seven." When he found out that it was not the "Bonanza King" he was on board, he had lost all interest in living any longer.

The rest is soon told. The "Victorian" with the three dead bodies and the two injured men (Wynstanley and the purser), and the crew of the "Columbian," started at once from the camp and met the "Dawson" at 1:10 A. M. that night and transferred the survivors to her, where the injured men were attended to by the doctors and nurses and brought to the White Horse Hospital. Both did well at first, but the purser had a relapse and died somewhat unexpectedly at noon on October 11th. Wynstanley recovered completely, and the rest of the crew had no serious injuries.

CHAPTER X.

WINTER MAIL SERVICE

When we organized our own river service we took over the mail contracts covering the river carriage of both the American and Canadian mails. Both contracts had some years to run and were at profitable rates. American contract covered the carriage of mail throughout the year, via the White Pass, between Juneau (110 miles south of Skaguay) and St. Michael at the mouth of the Yukon River, and there were branch services to Nome 115 miles beyond St. Michael and to other places in Alaska away from the Yukon River. The Canadian contract covered the carriage of the Canadian mail, winter and summer, between Skaguay and Dawson, with a branch service to Atlin. Both contracts involved heavy penalties, secured by large honds

We did not want the winter contracts, as they involved a dog sleigh service twice a week in each direction, extending over 2,500 miles on the edge of the Arctic Circle. In other words the contractors had to carry

the mails more than 10,000 miles a week with dog sleighs. We were a railway company and did not own a dog in our corporate capacity. However, we did want the mails in summer for our boats, so we decided to take the contracts over. With them we had to take over some 500 dogs then in service between Dawson and White Horse and on the Atlin branch under the Canadian contract. But we were able to keep out of the dog business under the American contract by sub-letting the winter service beyond Dawson amongst a number of sub-contractors who supplied their own dogs, and carried on the service admirably and at some profit to us until the American mail contracts expired, when we did not seek to renew them as they took us too far "off our beat."

When navigation opened in 1901 we had 500 idle dogs on our hands and soon learnt that idle Esquimaux dogs resemble "idle hands" in having mischief found "for them to do" by his Satanic Majesty. So we hired a good dogkeeper and loaded him and the dogs and a supply of food into one of our steamboats and took them down to a large island in Lake La Barge and there we left them for the summer. The keeper enforced



Double Dog Team



Winter Mail Service

order and cooked the food and looked after the numerous families of most fascinating woolly puppies. Semi-occasionally one of our boats called at Dog Island (as it is still called), in passing, to see how things were going on, and as another winter drew near we were able to dispose of our dog assets on favourable terms.

We had made up our minds from the start to organize the Dawson winter mail service on a horse basis. The traffic was heavy enough to warrant this and it was rendered possible by our having our own steamers on the river and being thus able to distribute by water carriage during the summer the immense amount of hay and oats and other supplies required for the horses during the winter.

Accordingly, the following winter, having sold off the dogs, we started the four-horse sleigh service for mails, passengers, gold-dust, parcels, and light freight, between White Horse and Dawson which we have maintained ever since. There are relay stables and rest houses every 20 to 25 miles, where good meals and beds are available for the passengers and where the horses are changed. The drivers go through with the sleighs and mail. The

distance now is 350 miles, as an overland trail has been made which shortens the river route which we originally travelled on the ice, by about 100 miles. During the busy season we average a sleigh a day in each direction, equal to about 5,000 miles a week, and employ about 250 horses with plenty of bone and breeding. Most of them would attract favourable attention in any English private coach.

When the trail is in good condition it is a pleasant trip. The cold is dry and bracing and does not penetrate the warm furs we supply our passengers, while we keep their feet warm with foot-warmers. The bright sun and the rapid motion through the still air (there is seldom any wind), invigorates both passengers and horses as they rush through the frost-bound, snow-clad woods, with the leaders galloping or cantering and the wheelers at a fast trot. Ladies who have made the trip have told me they enjoyed it more than they could describe.

But it is not always fine weather and a good trail, and our drivers are called upon at times for strenuous exertions and quick action, as is demonstrated by the following instances.

In the spring of 1902, before the "Overland Trail" had been constructed, our sleighs had to travel over the river ice, and this, of course. became increasingly dangerous as the spring advanced and the ice became less solid. In these circumstances one of our sleighs, with a full load of passengers and mail, early in April was on good ice and nearing Fort Selkirk, when suddenly the leaders broke through a "soft spot" without the slightest The driver jumped on his brakes with both feet and stopped the sleigh with half his pole projecting over the broken ice. His wheelers were down and had their heads in the water, and in their struggles were breaking the narrow margin of sound ice that intervened between the sleigh and destruction. At the same time the strain on the traces caused by the leaders dragging in the swift current was making the brakes "creep" in the ice that held them. A moment's indecision on the part of the driver, and the sleigh and all its occupants would have been dragged into the river and under the ice. There was no time for the passengers to free themselves from their fur robes and jump. In case of such emergencies, the harness, instead of being arranged in ordinary four-in-hand style,

was so arranged that by cutting the ends of the wheelers' traces and throwing the reins on their backs, the sleigh would be at once detached from its team. The hind ends of the wheelers' traces were made of rope for the purpose of cutting more quickly, because a mere touch with the edge of a knife will sever a rope with a strain on it. To be ready for quick action our drivers always carried a big sheath knife in the leg of their right boot.

With a sorrowful "Good-bye, my beauties." the driver cut the traces, and in less than five seconds from the time the leaders broke through, the team was gone under the ice. So urgent was the need for prompt action, that the front boot of the big sleigh was almost projecting over the broken ice as the last trace was cut. Then the driver, sitting calmly on his seat, reassured his passengers and instructed them to climb out one by one over the back end of the sleigh, and followed himself in the same fashion. Then a rope was made fast to the hind end of the sleigh and the passengers from a safe distance hauled the sleigh back to a position of safety. But our beautiful gray team, the pets and pride of the winter mail service, were gone, and their bodies, still harnessed together, were

recovered five miles down the river after the ice went out. Before the following winter we had the present "Overland Trail" completed, and since then the only places where we touch the river ice is when we have to cross a river too large to be bridged.

The following extracts from the mail service official reports, extending over a series of years, give a better idea than anything I could write of the conditions when there is "trouble on the trail."

"White Horse, Y. T., December 10, 1901. "I regret to have to amend my report for "the week ending December 8th. I reported "that the carriers whom I had sent out on "Sunday morning with ten horses and several "sleighs had got around the bad places on "the river safely. One of our men came up "from where the men were and gave me this "report in good faith, as they had got around "all that portion of the river which we consid-"ered dangerous. They came to grief, how-"ever, at a place a little farther on, where the "ice appeared perfectly safe, being no less than "18 inches thick and extending out from the "bank about 60 feet. The water had fallen "considerably from under this ice, leaving "it hollow and while the horses were on it a

"piece about a hundred yards long broke "down and shot out into the stream, leaving "eight horses in the water with two sleighs." "The men got seven of the horses out safely "after a hard time of over half an hour, but "one of the horses got tangled up in one of the "sleighs which was capsized and was drowned. "They managed to cut his mate loose, but "were unable to get at this one as he was un-"derneath in very deep water. Both sleighs "were in, but we got everything out safely ex-"cept one box containing a few sleigh bells of "very little value. The mail fortunately es-"caped without even getting wet. Further "particulars at hand regarding the drowning "of the team on the lake last Sunday, show "that the accident was occasioned by bad "cracks in the ice. At the particular spot "where the accident occurred, there was a 'V' "crack in the ice. It was not quite daylight "when the accident happened, the carriers "having started out very early in order to "catch Monday's train from White Horse. "They report that they had tested the ice a "minute previous to breaking through and "found it 6 inches thick. They were unfor-"tunate enough to drive onto the piece al-"ready described where the ice was cracked

"and it sunk right down under them. The "mail was not lashed onto the sleigh and it "floated up and they threw it out onto the "ice. They got one horse out after a long "time, but he was so far gone that they had "to kill him. The mail looks in very bad con-"dition, but is really not much damaged and "all of it can be deciphered."

"White Horse, Y. T., April 23, 1904.

"Driver Gage reports trail practically bare "entire distance Dawson to White Horse, "and came all the way on wheels. The only "places where there was any snow at all be-"ing on few side cuts facing north between "Pelly and Stewart and on Wounded Moose "Summit. The frost is coming out of "the ground rapidly and road in many "places is axle deep in mud. Trail will get "worse from now on until frost all goes out "of ground and starts to dry up. Gage "got his wagon across the river at Yukon "Crossing, but this is the last for season and "they are now transferring there. At last "reports Pelly and Stewart crossings were "still safe to cross with horses and rigs, but "it is only a matter of a few days before "these will also be unsafe. Tahkeena is "also expected to go out any day."

"White Horse, Y. T., May 4, 1904.

"The weather is moderate over the en-"tire route. The stage that left Dawson "April 26th has not yet reached Yukon "Crossing. It is thought that it is held "up at Rosebud or Scroggie Creek. These "creeks are located between Pelly and "Stewart. They are both very bad places, "and it is quite possible that they are so bad "that they are impassable. The north-bound "stage, leaving White Horse April 27th at "7 o'clock A. M., waited at Yukon Crossing "until Monday night, May 2d, and then the "driver was directed to take the wagon to "pieces and put it across the river and go to "Minto to get horses and proceed. He got "away from the crossing at I P. M. vester-"day. If he does not meet the other stage "at Pelly he will be up against the same prop-"osition and will have to put the wagon "across the Pelly and go to Hume for "horses. It is possible that the stages will "meet at point where trouble is and transfer. "We have not sent a stage out this week "from either end - did not think it advis-"able to do so until we heard from the ones "on the road, as there is no use piling them "up unless they can get through. Both

"mentioned creeks at times become raging torrents and are from 4 to 10 feet deep and in some places spread out to half a mile in width."

"White Horse, Y. T., May 9, 1904.

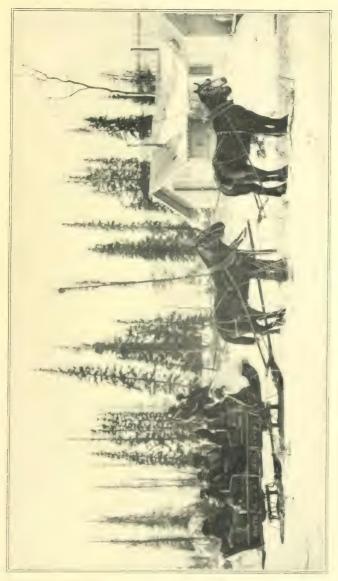
"Herewith report from Driver Burwash:—
"Impossible to cross Pelly, 4 feet of water in
"road houses, 7 horses drowned, 6 north side,
"one south side, arrived here 9 P. M. April
"3oth. Stableman crossed to feed horses in
"tent; been unable to hear from him since,
"except to hear of drowned horses. We all
"had to leave roadhouse in canoe. Gage
"arrived, is taking his passengers back to
"Minto. Pelly jammed with ice from mouth
"up. May's wagon, with mail, upside down
"in ice. Later have learned stableman is
"sick north side.

"White Horse, Y. T., Jan. 20, 1906.

"On my way out from Dawson this last "trip temperature ranged from 30° to 70° "below with very high winds. Trail badly "drifted in places and very heavy along "entire route. I found the road, especially "the Wounded Moose Summit, in very bad "condition. The snowfall on the north "end of the trail has been extremely heavy "this year, and this combined with low

"temperature and high winds means a very "heavy drifted trail all the time. Conditions "on the Wounded Moose Summit are very "bad and the stages are having a very hard "time getting across at all. Driver Joe "McDonald, who arrived here on the 15th, "was nearly three hours making about 200 "yards on the Summit, and probably would "not have got over at all if he had not had "four or five good strong passengers with "him. The trail is very high on the summit "and if a horse gets off the trail, which is "very easy, he simply goes out of sight in "the loose snow on the side of the trail and "the drivers have to get off and unharness "and go through all kinds of maneuvers to "get over at all.

"As you are aware, the government has "put three men on the trail to keep it open "and about a week ago they sent out an extra "man to assist in taking care of the Wounded "Moose Summit. I am afraid we are go-"ing to get into serious trouble on this "Wounded Moose Summit unless we take "some drastic action immediately. If a "driver ever gets into trouble on the Wound-"ed Moose Summit this kind of weather, he "is liable to freeze himself badly, if not



WHITE PASS WINTER MAIL SERVICE SLEIGH



"lose his life, and if the driver gets frozen,
"we are also liable to lose a four-horse
"team, and we are apt to lose a horse or two
"in any event at any time."

"White Horse, Y. T., June 7, 1906.

"Horses Nos. 232, 67, 89, and o14 were "drowned on May 20th in Wounded Moose "Creek. No. 014 is an Orr & Tukey horse "and we will have to replace it. Will ad-"vise number of horse given them when "exchange is made.

"Following is detailed report of the acci"dent as made by Stableman David Smith:—
"'I beg to make the following report of the
"drowning of 4 horses, Nos. 232, 014, 67, and
"89 in Wounded Moose stream on May 20th,
"when making the spring clean-up on the
"trail.

"'On arriving at Wounded Moose we found "the bridge had gone and the stream nearly "bank full, with the water still rising, so that "fording was out of the question. I with "four other stablemen concluded to bridge "it, which we did in such a way that we all "agreed that it was safe; the bridge took us "about four hours to build. By the time the "bridge was completed the water was rising "so fast that when we put the horses on it

"that were drawing the stage, the bridge "naturally gave a little, but enough to catch "the current, which instantly swept it from "under the horses, leaving them attached to "the stage struggling in the water. With "good presence of mind one of the men at-"tached a chain from the axle of the wagon to "a tree on the bank, holding it off the horses. "Even after that we could do nothing "toward saving them as they were in such a "position in the raging waters that it meant "certain death to anyone attempting to cut "them loose. After they had stopped strug-"gling we managed to get a line over one of "the horses' feet (which I might say was the "only thing in sight), and pulled them to the "bank, getting the harness from all of them in "that manner. We then cut a road through "the woods some distance farther up the "stream and succeeded in building another "bridge which we crossed with the remain-"ing 27 horses and stage.

"'To give you an idea of the condition "of the trail I might say that the accident "occurred about noon and we were then only "about three miles from the post which we "had left at 6 o'clock that morning. We "had built three smaller bridges before that.

"We reached Eureka that night at 12 o'clock,
"a distance of 11 miles in 18 hours. We
"built seven bridges between Stewart Cross"ing and Indian Crossing. In closing I
"might say that it is with the deepest re"gret that I have to make a report of this
"kind. If you consider there were any mis"takes made I will say that it was lack of
"judgment on our part, as we did what we
"thought was the best under the circum"stances."

"White Horse, Y. T., January, 17, 1907.

"Driver McDonald arrived here last night "and reports the trail in probably the worst "condition it has ever been since the com-"pany operated stages. The trail from Daw-"son to Pelly is in fair condition, except the "Wounded Moose Summit, which was badly "drifted. Stages which met there Satur-"day afternoon, both north and south "bound, had to 'line' over the Summit. The "horses went down in the deep snow and had "to be unharnessed, taken across singly, and "stages hauled across with lash ropes. From "Pelly south the trail is drifted badly all "the way, miles and miles of it being com-"pletely obliterated, and horses in many "places are unable to find the trail at all.

"There was a heavy fall of snow (over a "foot in some places), accompanied by a "very severe north gale. McDonald was out "until 9 and 10 o'clock at night making "three stations with an empty sleigh. Will "have to load very light for the next two or "three trips, as the horses are simply unable "to handle big loads."

"White Horse, January 20, 1907.

"Stage out 10 A. M.; no passengers. 700 "Ibs. mail; 1,200 lbs. through freight. Have "cancelled schedule on account of extreme "weather, but unless gets worse will con-"tinue to run stages making slow time. "62° below in Dawson this A. M. Ther-"mometers out of business along trail."

"White Horse, Y. T., March 31, 1907.

"Weather Conditions: Weather has been "the worst on record. Wind blew a gale "from the south on Sunday, Monday, and "Tuesday. Tuesday afternoon Dawson ad-"vised that it was blowing a blizzard from "the north and snowing and drifting hard. "The storm reached here about 10 o'clock "Tuesday night and continued all Tuesday "night, Wednesday, and Thursday, drift-"ing badly all the time. Temperature "ranged from 10° to 30° below zero here

"while the gale was blowing. When the "wind went down the thermometer kept "it company. It was 40° below here and "went as low as 60° below on the trail."

"Trail Conditions: The trail conditions "are worse than have ever been experienced "in this country before. The blizzard "drifted the trail full the entire length of "the line. All stages were very late and "we had to send stages a long distance "apart and load very light. Drivers Don-"nenwerth and Stewart took four days each "to reach Yukon Crossing and were out "until late at night as it was. Driver Dart "took 12 hours to make the 23 miles from "Wounded Moose to Indian River, Driver "Chinery was unable to make from Indian "River to Dawson, had to stop at Grand "Forks and telephone to Dawson for another "team to take him in. Driver Webster was "all day going 25 miles from Stewart Cross-"ing to Wounded Moose. Driver McDonald "was 3½ hours making 5 miles. And so on "with all the drivers.

"From Stewart Crossing to Dawson the "snow was belly deep on the horses, and "drifted so hard in places that a team could "only pull a sleigh three or four lengths and

"then stop and rest. Our slow freight teams "which were between Yukon Crossing and "Pelly tied up altogether and did not at"tempt to move.

"The condition of the trail generally is "beyond description, not a sign of a thaw "anywhere. The snow is so deep now, how-"ever, that when the weather does get warm "it will cut to pieces in a few days. The "snow is loose and there is no good bottom "to the trail.

"Owing to the condition of the trail and "the intense cold, the horses are all very "tired and many of them are pretty near "used up. Will have to nurse them along "carefully for the rest of the season, and it "looks now as if it will be all we can do to "handle the passengers and mail, and the "freight will have to await the opening of "navigation."

It will be realized from these reports that it is far from child's play on the trail when things are going wrong. But, so far, we are fortunately able to say that there have been no serious accidents and that no lives nor mail have been lost. This applies to the Dawson service.

On the Atlin Winter Service (which being

a dog service we did not renew when the contract expired in 1903), we were not so fortunate, as the following report shows:

"Skaguay, Alaska, Dec. 15, 1902.

"On November 25th, two mail carriers, "Messrs, McIntvre and Abbey, left Log "Cabin for Atlin with dog teams, carrying "the mail. They reached Atlin in safety, "delivered the mail, and started on their "return trip. They were last seen on No-"vember 30th at Butler's Roadhouse on "Taku Inlet, half way between Taku and "Golden Gate. As they did not reach Log "Cabin when expected, it was feared they "had met with an accident and searching "parties were sent out. Their sled tracks "were followed on the lake to the Golden "Gate Channel, where Mr. Abbey's hat was "found frozen in the ice about half way be-"tween the Golden Gate side and the island. "There is no doubt that McIntvre and Abbey "are lost.

"The mail and sled (with the dead dogs "attached) were found under the ice. The "sled was hauled out, the mail dried, and "again forwarded. There has been no ac-"count of the finding of the bodies of the "men.

"Mr. Abbey was on the run last year and "was thoroughly familiar with the route. "Mr. McIntyre was an old hand at this sort of "work, but was new on this route."

The bodies of the unfortunate men were subsequently found close together between the sled and the mainland and in quite shallow water, but of course frozen under the ice. It was surmised that both dogs and men were pretty well exhausted before they reached Golden Gate and broke through the ice, and that the men became confused in the icy water and quickly lost consciousness. But it is mere surmise. All that can certainly be known is that both men had many times previously been in worse difficulties and got themselves and their dogs out none the worse; and that there was nothing in the known circumstances to explain the tragic result

CHAPTER XI

A NIGHT IN A SLEEPING-CAR

They tell the story of a Wall Street banker, who had just been elected president of a big trans-continental railroad system, that on his first trip of inspection over the line his palatial private car was shunted at a road-side station to be attached to a branch line train. While he was waiting, the great man walked down the track and pompously watched the Irish "section boss" directing the operations of his Chinese "section gang." The Irishman had his coat off and a track shovel in his hand, and he looked as if he might do something at any moment. But he did nothing beyond sitting on the "hand-car," smoking and giving occasional orders and encouragement to the "hathins" under him. Finally the president thought it was high time to wake him up a bit, so he said in a tone of authority, "My man, why don't you work? You are the 'section boss' of this section, aren't you?" The Irishman replied, "I am that, and who might you be?" The great

man swelled out his chest and said crushingly, "I am the president of this railroad, sir." The Irishman, nothing daunted, took a good look at him and said, "Well, you've a d—n good job"—and then, after an impressive pause, added, "iv ye can only howld it."

Very possibly this may be the sentiment towards myself of anyone who has read these notes so far, and there is no doubt that it may seem that the president has an easy time. But to show that even presidents have their worries I am tempted to tell a story on myself. It is not necessary to read it, as it has nothing to do with the "White Pass," beyond showing that its president has his worries the same as other people.

I was returning from Alaska in the spring of 1907, and our train was due in St. Paul at a quarter past two that afternoon but was nine hours behind time. The last train for Chicago left St. Paul at 11 P. M., so unless it waited for us we would miss it, as we had no chance to make up any of our lost time and might lose more. This was the position of affairs when I went to dinner at 7:30. While I was dining, bang went something, and it turned out we had pulled the drawbar out of

A Night in a Sleeping-car

the car behind (which was my sleeper). We backed up to it and after an hour's work got it in tow with chains, but we had to run slowly in consequence and it would be about 2 A. M. before we could expect to reach St. Paul. There seemed no chance of catching the Chicago train that night.

The conductor said the sleeping-car would remain in the station till 8 in the morning with any passengers that wished to sleep on board, and I went to bed with an easy mind, but the other passengers sat up. During my sleep I became sub-consciously aware, without waking, that the train had reached St. Paul and that people were bustling about and then everything became quiet. The quiet lasted for an indefinite time, when I was wakened by hearing the door of my stateroom open and shut very softly. This seemed queer and I got up to investigate, but there was no one about. I found that the other passengers had all got off, so that I was the only passenger in the car, and that, presumably supposing it empty (as I was in the state-room with the lights out), it had been shunted out of the station and was standing on a siding about one-third of a mile away, surrounded by a perfect jungle

of freight-cars of every sort and kind. I thought I would have a nice time in the morning getting my big bag to the station, and then I went to bed again.

I was nearly asleep when I heard my stateroom door again open very softly. A mirror was opposite the door at the other end of the little state-room, facing me as I lay with my head towards the door. A gleam of light came through the open door from a lamp outside in the car and showed me in the mirror the reflection of the enormous nigger who was the car porter. I watched him in the mirror silently as he shut the drawing-room door slowly and vanished sideways and noiselessly into my little dressing-room, just inside the state-room door and behind my head as I lay. He always went in there when he called me with hot water, clean towels, etc., and I thought, sleepily, "Confound him, why does he call me so early." Then I remembered that this must be his second visit, as I had heard the door open and shut before.

By this time I was awake and beginning to wonder what it all meant. The car was so still that the slightest movement rocked it on its springs and the least noise was audible.

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I lay quite still but could not feel that the big nigger was stirring in the little dressing-room, and he was certainly making no noise. Five minutes went by, but he did not come out, and I began to wonder more and more what he could be up to in there at that hour. What hour was it? Very quietly and silently (after feeling with my hand that the dressing-room door was shut), I lit a match and looked at my watch and it said 3:25. Funny sort of hour for a nigger to be dawdling in one's dressing-room in the dark! I began to remember that I was alone with him in the car, lost in a jungle of empty box-cars.

So far as any chance of help was concerned I was worse off than if I had been in a real jungle, because the railway freight-yards of all large cities are infested by the most notorious criminals, who find in such yards a sure hiding-place and refuge from the police. There is therefore always a large floating population of desperate characters living in the empty cars, and stealing their food, clothes, and whatever else they desire from the contents of the loaded cars. The railway police and detectives wage constant war on these ruffians, but their ranks are recruited as fast as the police can thin them out. Many

a dead body is found in the morning in these yards, apparently run over by a train, but really murdered first and placed where it will be shunted over before morning, for the desperadoes know the ways and customs of their yards as well as medieval outlaws knew their forests.

Having carefully reviewed all these pleasing features of the situation, my mind reverted to why we were in that confounded vard instead of safe in the station, as we should have been. I saw how easy it would be for the porter (having no one but me, out of sight and asleep in the dark state-room) to say the car was empty and have it shunted. If it were necessary to murder me in order to rob me, nothing could be more easy than to strip off my pyjamas and burn them with my clothes in the car heating-stove, and put the body in an empty box-car bound for some distant place, where it would not be discovered for a month or more. It would be supposed I had left the train with the other passengers, and my friend the big nigger porter would have my funds and could select his own time to disappear without creating suspicion.

Of course, he might be merely mad—but on

A Night in a Sleeping-car

reflection that did not seem to help matters much.

What was certain was that it was half past three in the morning—that we were alone in the car—that the car was buried in a jungle of freight-cars infested by the desperadoes of the city—that the nigger was twice my size and not much more than half my age—and that for fully fifteen minutes he had been skulking inside my door and in the little dressing-room just behind my head.

If I had any advantage over him it would be in brains not brute strength, so I lay quite still and gave my brains a chance. But the chief thing that occurred to me was that at any moment when he might think I was asleep he could softly in the dark open the dressing-room door behind my head and reach out and have me by the throat as I lay on my back all hampered by the bedclothes. On the other hand any movement of mine would shake the car and put him on his guard. Then I remembered that I had much more money than I usually carried. I reflected that even the most hardened criminals do not murder for the fun of the thing, and that if he were criminally disposed to take advantage of the position, robbery and not murder

would be his main object. So I quietly got my purse from under my pillow and in the dark counted out about \$50, which I replaced in the purse and put the remainder in a secret inside pocket of my waistcoat. My idea was that if he wanted my money I would offer him my watch and purse and tell him to clear out, and thus save the greater part of my money.

Having completed this arrangement I began to review my chances of defending my-My only weapon was a pocket-knife which would be sure to shut on my fingers and leave me worse off than before. I had also an umbrella, which is a very useful thing in the open where one has room to make a successful stab in the face, but useless in the dark and in the narrow limits of a small stateroom. If it came to a fight there was neither room nor light to employ any strategy, and it would be a mere wrestling match with a younger man twice my weight. I could think of nothing that would be likely to give me any advantage. But something must be done. It was impossible to lie there any longer in the dark waiting to be attacked. Why not turn the tables and attack him unprepared in the dark?

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With this in view I sat up very quietly and threw the bedclothes off. I was thus out of his reach, unless he came out of the dressingroom. So I began to pretend to snore gently in order to tempt him to begin. I expected him to open the dressing-room door quietly and reach out for my throat, and then I proposed to jump for him and take him by surprise. But nothing happened. He was evidently in no hurry, and I kept on softly snoring. Five minutes of this seemed an eternity—and still nothing happened. that hour of the morning none of us are at our best, but I could stand it no longer and resolved to put an end to the suspense and attack him in the dark in the little dressingroom, where at least he could not get me down on the floor because there was hardly room to stand up. With this idea, and still gently snoring, I crept to the dressing-room door so softly as not to shake the car. I felt for the handle - got it - waited a moment - and sprang in. My out-stretched hand caught nothing - I felt about for him in the dark he was not there!

The reaction was worse than the suspense, and I broke out into a cold perspiration. Was the car haunted? Was I mad? I had seen

him go in; where was he? The window was tightly fastened. He could not have got out of it. I went step by step over the evidence of my senses, testing them. I had certainly heard the drawing-room door open. Beyond question I had seen the ray of light and the reflection of the nigger in the mirror; then I had seen him, in the mirror, slowly vanish sideways into the dressing-room as he shut the state-room door noiselessly. There could be no possible room for doubt about any of these things. Where was he?

Well, wherever he was, I could think things out as well somewhere else as standing in the cold and dark in my pyjamas and bare feet in the dressing-room, so I groped my way back into the state-room and stumbled over my boots. That was funny, because I had left them at the other end of the room under the sofa when I went to bed. They had not been worn and did not need cleaning. What were they doing on the floor near the door? Could the nigger have come in to get them? That would account for the first opening and shutting of the door. But what about the second time, when I had seen him in the mirror going into the dressing-room?

I opened the state-room door and lay down

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on the bed as I had been when I saw him. Then I noticed that the mirror was not square opposite to me but the width of the bed to one side, so that I saw things in it at an angle, Furthermore, the state-room door, though opposite to the mirror, was not square with it but at an angle because of the turn in the passage outside. I got up again and got a long piece of string that had tied up some books. I fastened one end to the handle of the state-room door and ran the string through the catch on the door-jamb and lay down as before, watching the door in the mirror while I slowly pulled the string. The angle at which I saw the mirror added to the angle at which the door was set showed the opposite way in the mirror and gave the effect of the door closing towards, instead of away from, the dressing-room. Anyone going out of the door would appear in the mirror to be sliding sideways into the dressing-room.

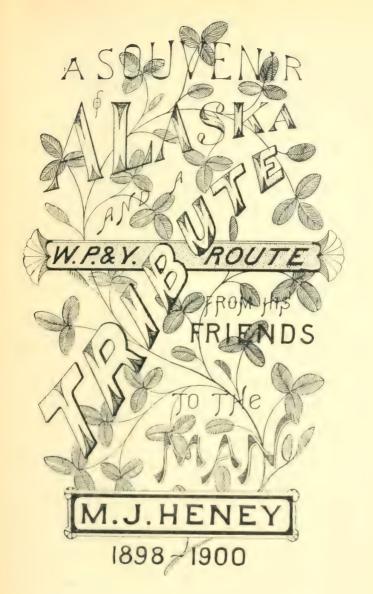
I lay down and went to sleep and the next thing I heard was the faithful nigger bringing my hot water and saying in a cheery voice, "It's half past seben, sah."

What will never be explained is why he should have chosen to clean my boots at half past three in the morning. I was ashamed to ask him.











THE TOAST

We have camped by mountain and river,
We have slept and told yarns together,
We have broken bread at his table,
And roughed it in all sorts of weather.

*

So let us drink **t**o our brother,
"Good luck and a life in clover;
Good health, and wealth and a loving wife
And good rest when life is over."

And be it RESOLVED

THE RESOLUTIONS

That Whereas, the time is at hand when the last spike is driven, the last barrowful of ballast dumped and the great ~ WHITE PASS & YUKON RAILWAY receives its last touches from the hands of its builder and contractor; and. Whereas, this brings with it the time of farewells, and the separation into other fields of hardy adventure, of those who have braved the avalanche and scaled the summit together, and have shared the dangers and hardships of these Arctic solitudes: Therefore be it RESOLVED, that we hereby set our hands to this testimonial of our high appreciation of the character and conduct of Contractor, M.J. HENEY, the~ builder of the White Pass and Yukon Railway, whom we have ever found to

be a manly man, a true friend and a cheerful comrade; and that we present him with this souvenir of our affection and esteem, in the belief that it will pleasantly recall many Alaskan days that are passed, and many -Alaska formed friendships that are eternal, when he goes to other climes to blast a way through the mighty barricades of Nature, and pass them with the steam whistle which echoes civilization and prosperous development, and also, when he has driven his last spike and retired to slip--pered ease and a contented contemplation of his own worthy achieve ments







'HIS' WORK

Roud begun at Skagmay, Alaska April'98
. reached White Horse, Y.T June 8,1900
. completed along lake, July 29,
Length P&A R&Nav Co, Alaska 20:4
. B.C.Y R.R., British Colum? 309
. B.Y. R.R., Yukon Territory, 591
. over all Miles, 110'4
. in Air Line . , 88.0
Cubic Yards of material moved 1,431,600
snow shovelled 476,000
Average grade to Summit permile 141 ft
Maximum 206.
Highest Altitude reached 2940.
Guage of road
Maximum curvature 16°, radius, 3593.
One tunnel, length 245.
Snow Sheds, " 3/57.

THE FIRST TRAIN.

In the Pass, the whistle has sounded,
There are no more heights to scale;
The work beyond is but children's play,
A race over hill and dale!
The child has been helping its father
As in days that are past and gone,
And the gateway is proudly opened
That leads to the great Yukon!

Oerhead there are twin flags flying
To honor the winter day;
There is honor for each one present,
And for many far away;
There is honor for all the leaders
For those who schemed and planned,
As well as for those who found the coin
And for those who took command.

There is honor too for the workers, With transit, level, and rod,

Who scaled the hills where the ravens nest
And never a foot had trod;
Who carved from the buttressed mountain
With a patience most sublime,
Mid the wintry storms and piercing cold,
A road that shall last for time

There is honor too for the workers

With pick and powder and spade rocks

Who hewed and blasted the storm-scarred

And trimmed up the winding grade;

For each man took his life in hunds

When he daily went to work,

And never a man of all was found

From a danger-post to shirk

There is honor for all the army,

For the living and the dead,

(For to some of high as of low degree

The grade to the church yard led);

But courage and science have conquerd

While people have laughed and jeered,

At the men who had faith and patience
And never trembled or feared!

'Tis a thing they may all remember,
And every one may be proud,
In the years to come to tell his boys
That he was one of the crowd.
Not many can say they have labored
More steadfastly heart and soul,
Than the men who fought to unite the
To the country round the pole.

IN MEMORIAM

Robin Brydone Jack Hugh Foy.









